

# Journal of the Royal Institute of British Architects

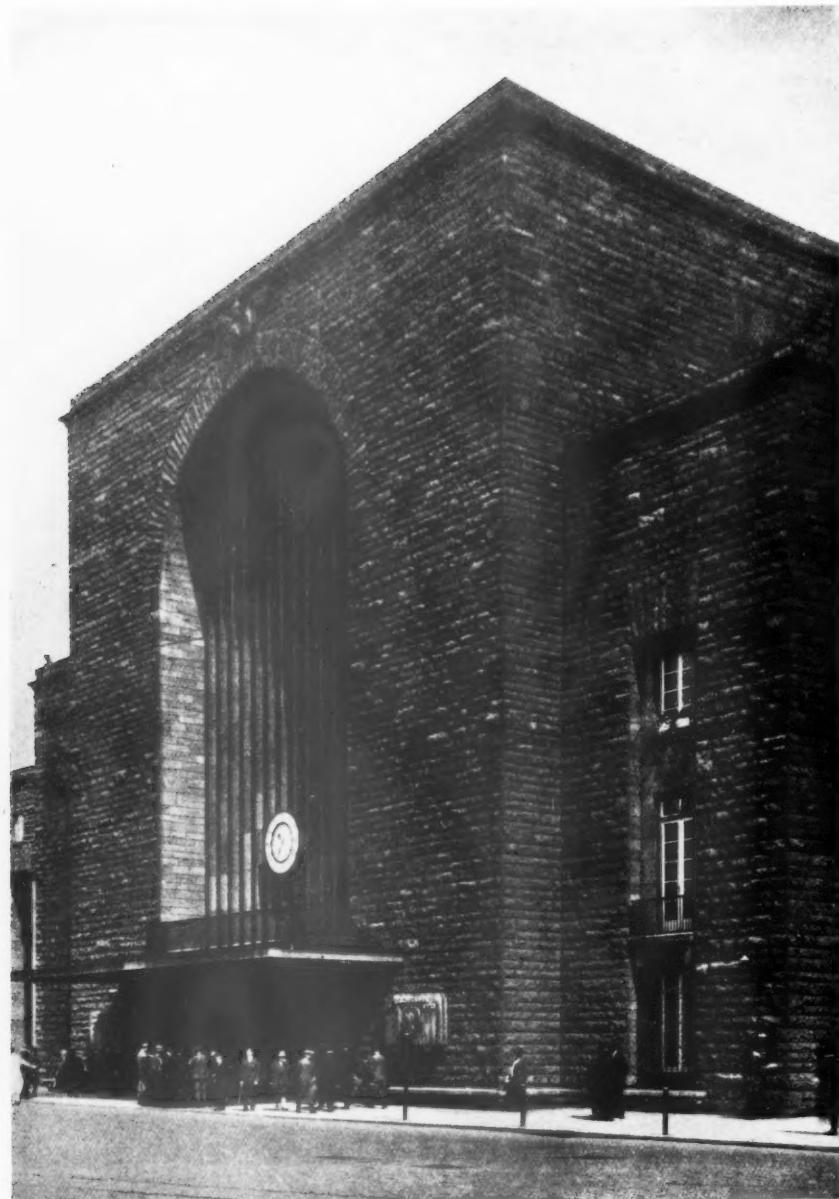
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## Contents for 2 May 1931

	Page
STUTTGART RAILWAY STATION .....	<i>Frontispiece</i>
MODERN FLATS. By G. Grey Wornum [F.] .....	435
VOTE OF THANKS AND DISCUSSION .....	448
OPENING OF EXHIBITION OF THE ARCHITECTURE OF MODERN TRANSPORT .....	456
REVIEW OF THE EXHIBITION. By John Dower [A.] .....	459
ARCHITECTS (REGISTRATION) BILL, 1931. By C. McA. Butler [L.] .....	462
CORRESPONDENCE :	
VALUATION OF DAMAGES IN ANCIENT LIGHT DISPUTES. Henry Elwig [F.] .....	463
REVIEWS :	
LE CORBUSIER UND PIERRE JEANNERET. By E. R. Jarrett [A.] .....	464
MODERN INTERIORS IN COLOUR. By E. R. Jarrett [A.] .....	464
GOLF AND COUNTRY CLUBS. By Stanley Hamp [F.] .....	464
ACCESSIONS TO THE LIBRARY .....	465
OBITUARY :	
FREDERICK WHEELER [F.] .....	467
LOUIS VIOLLIER [Hon. Corr. Member] .....	467
RONALD EDWARD EILoART [A.] .....	467
V. STEADMAN [A.] .....	468
H. SESOM-HILEY [L.] .....	468
PERCY HARRISON .....	468
NOTES .....	468
ARCHITECTURAL COPYRIGHT .....	469
ALLIED SOCIETIES :	
WEST YORKSHIRE SOCIETY OF ARCHITECTS .....	470
SOUTH WALES INSTITUTE OF ARCHITECTS .....	470
DEVON AND CORNWALL ARCHITECTURAL SOCIETY .....	471
MANCHESTER SOCIETY OF ARCHITECTS .....	472
ESSEX, CAMBRIDGE AND HERTS SOCIETY OF ARCHITECTS .....	472
ELECTION OF STUDENTS .....	474
NOTICES .....	474
COMPETITIONS .....	475
MEMBERS' COLUMN .....	476
MINUTES XIV .....	476
ARCHITECTS' BENEVOLENT SOCIETY .....	476



*Photo: F. R. Yerbury*

RAILWAY STATION, STUTTGART

Architect: Paul Bonatz



Wasmuths Monatshefte Baukunst und Städtebau

FIG. 1.—CIRCULAR HOUSING SCHEME AT LEIPZIG. Architect: Hubert Ritter

## Modern Flats

BY G. GREY WORNUM, F.R.I.B.A.

[*A Paper read before the Royal Institute of British Architects, Monday, 13 April 1931*]

THE PRESIDENT, SIR BANISTER FLETCHER, F.S.A., IN THE CHAIR

**M**R. PRESIDENT, LADIES AND GENTLEMEN,—In preparing my paper I have been strongly moved to put before you mainly the work that has been designed and carried out by the London County Council ; and I am restricting myself almost entirely to the subject of housing the working classes, since I hold that nowhere in the world to-day is such a high standard of housing maintained as by this great London body. We have all heard talked of so much the attractions of the Vienna housing, the originality and ambition of the German housing, the quaintness of the Dutch housing, that we have left very much unsung the saneness of the English housing.

To commence with I am going to describe very briefly the first efforts in London to legislate for better working class housing, and the arrival of the London County Council to take the helm and develop its housing to the extent it embraces to-day.

It was not until 1851 that public attention was drawn in Parliament to the terrible condition of working class housing in London. The late Earl of Shaftesbury pointed the finger.

Statistics show that in 1842, in the parish of St. Georges, Hanover Square, in which this Institute is situated, there were over 900 families each living in one room. Other parts of London were worse, and conditions in the provincial towns were no better.

As a result of the Earl of Shaftesbury's pleadings in 1851 two Acts were passed. One affected the purchase or erection of lodging houses by parishes subsidised as necessary out of the poor rate, but certain borrowing powers were given them for purposes of capital expenditure. The other Act empowered the Metropolitan Police to supervise common lodging houses in respect of morality, sanitation and repair.

An Act was also passed to control the number of persons living in one house, and in 1855 an Act gave corporate existence to communities surrounding the City of London.

Acts of 1866 and 1867 gave further facilities beyond the 1851 Act for borrowing for building purposes on a 40 year loan.

1868 saw an Act to enforce landlords to keep



FIG. 2.—OSSUISTON ESTATE. CHAMBERLAIN HOUSE  
G. Topham Forrest. Architect to the L.C.C.

their lettings in suitable repair and included forced demolition of unsanitary houses and laid down scales of compensation. For the working of this Act Medical Officers of Health were first appointed.

1875 produced further powers beyond the previous Act and enabled whole areas considered unsanitary to be condemned and demolished.

These Acts did not, however, work smoothly or produce the desired result, namely sufficient and suitable working class housing.

During 1884-1885 a royal commission sat to investigate the subject. The chief recommendation of this body was that the power conferred by the Act in existence on vestries and public bodies be handed over to the Metropolitan Board of Works and the City Commissioner of Sewers. This recommendation became law under the Housing of the Working Classes Act, 1885.

In 1888 the Local Government Act transferred this authority to the London County Council. The Council soon found that the various Acts required consolidating and overhauling, and the Housing of the Working Classes Act, 1890, resulted. From this date the fine building record of the L.C.C. commences. The L.C.C. admits of a Superintending Architect to the Council and a large staff under him. Mr. Topham Forrest, who fills the former rôle, has earned the praise of the whole profession for the conduct of his department, with all its ramifications apart from his duties as Supervising Architect. The enormous amount of building, however, has to be decentralized. This is achieved by the appointment of a certain number of principal assistants, who become, in effect, themselves architects to certain schemes under the supreme control of the supervising architect. This system has



FIG. 3.—L.C.C. EAST HILL ESTATE, WANDSWORTH. ARCHWAY TO COURTYARD OF NEWLYN HOUSE  
G. Topham Forrest. Architect to the L.C.C.

drawn some first class men to the department and produced far better results than the Office of Works system. I feel sure that in connection with certain L.C.C. schemes I am about to describe and show you I may mention the name of Mr. Minton Taylor, a Licentiate of this Institute, in whose hands these schemes I am showing have been mainly developed. One may say that he has devoted his life to the tenement problem, and having known him for some years I have not yet plumbed the depths of his experience.

Most of the important housing schemes abroad are built outside the cities. No city has so difficult a problem to face as London. She is troubled by enormous areas of slum, consisting of occupied houses, both by their density and condition unfit for human habitation. Before any rebuilding can be commenced the existing tenants have to be housed elsewhere. Many of them must live centrally in the Metropolis so as to be near their work, and such land as they would occupy is expensive.

The Tabard Street estate in South London is of  $16\frac{1}{2}$  acres, and before rebuilding in 1917 consisted of two-storey houses at a density of over 80 houses to the acre. I need hardly mention that the maximum density that State aided housing

allows is 12 to the acre. I may further add that a density of 60 to the acre brings houses 12 feet back to front of each other.

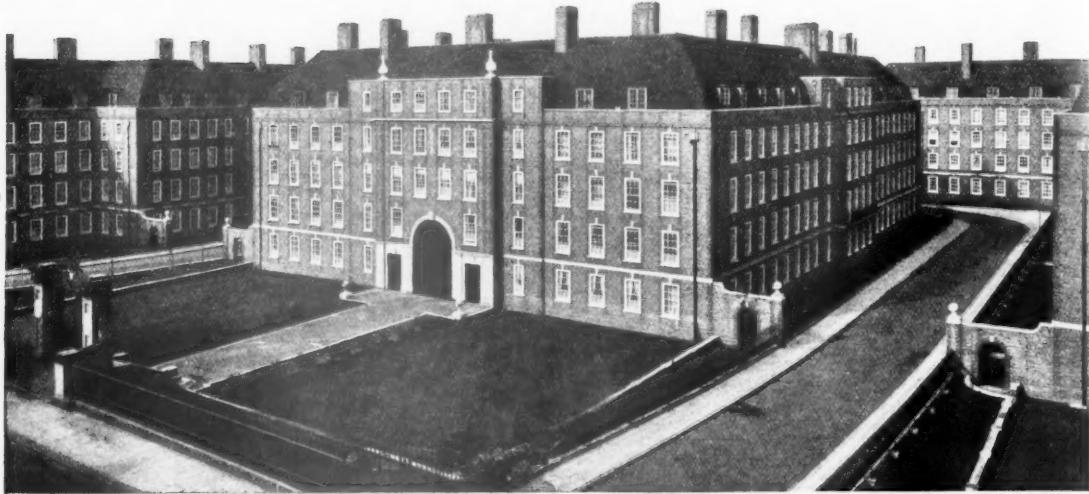
In the new lay-out about half the former population has been housed and an area of 5 acres of recreation ground created. A standard of planning was set to give every living room 160 sq. feet and every bedroom 100 sq. feet minimum. The scheme houses 4,500 people, though there may have been some births since my statistics were made.

This scheme was started before the war, when there was not then the pressing need for density that there is to-day.

The new scheme at East Hill, Wandsworth, allows of 66 flats per acre and the housing of two persons per habitable room was allowed for. Since the passing of the 1930 Act a density of  $1\frac{2}{3}$ rd persons per habitable room is allowed for in rehousing schemes. Such is the difference in result between two-storey and five-storey building; new slums are not being created by these modern tenement blocks.

A comparative plan is illustrated (Fig. 5), showing three and four-storey lay-outs on the same site as a further example of how open space can be obtained with advantage by building higher.

Such gaining of open space can be well adopted



Block from "The Builder"

FIG. 4.—L.C.C. EAST HILL ESTATE, WANDSWORTH. Newlyn House, General View  
G. Topham Forrest. Architect to the L.C.C.

in suburban housing schemes. The plan of a German estate (Figs. 15 and 16) shows an effectively interrupted road. The extra land taken up is available on account of the three-storey buildings introduced, and they provide fine terminals to the view. The L.C.C. have done this on some of their housing estates, and the three-storey flats at the Watling estate, Hendon, serve that purpose.

Having accepted as a fact that the higher you build tenements the more ground you have for recreation purposes, keeping of course to a fixed density of population, the question arises as to how high one should build.

Under stress of terrible overcrowding the L.C.C. some years ago planned nine-storey blocks for the Ossulston Street area in Kentish Town. This height necessitated both lifts and central heating and hot water. On examination the scheme was found to be too costly. A lift was tried out at Tabard Street and is still there—its cost at Ossulston Street for nine stories was estimated at £211 per annum without an attendant, who would cost a further £150. The lift at Tabard Street is unlocked by the tenant when required, but does not help his visitors, and no further lifts have been installed. The Ossulston Street Scheme, however, fired Messrs. Barnes and Davidge to produce a very

interesting scheme for Limehouse, which ran to eleven storeys and covered an area greater than Hampton Court. This was to rehouse 2,500 persons from Limehouse Fields. A particular innovation in the planning was the arrangement of two-storey dwellings with the outside approach balconies passing the lower floors of each tenement only. Central heating, hot water, and lifts were schemed and a small balcony court was given each flat. This scheme, as far as I know, has never matured.

With the relaxation of the London Building Act five-storey buildings (one storey being in the roof) can be erected with 13½ inch outside walls throughout, and this appears to be the economic height to build at present.

I now propose to occupy a few minutes on the plan evolution of the L.C.C. tenement. Such a survey brings out more clearly than any other means the salient points in the modern planning of such buildings.

When Mr. Minton Taylor first joined the L.C.C. in 1892 tenements were being built four storeys high and with flat roofs. The stairs served two flats on each floor and the cost was 1s. 1d. per cubic foot. Peabody Buildings, Guinness Trust Buildings and other housing organisations all followed this model more or less.

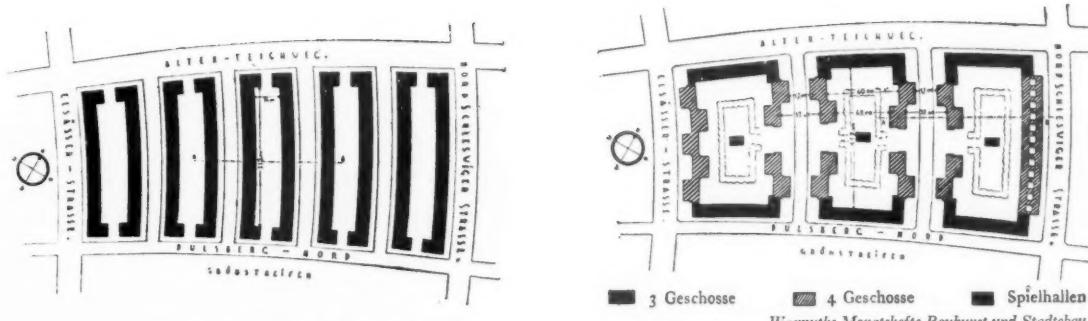


FIG. 5.—COMPARATIVE PLANS OF THREE STOREY AND FOUR STOREY LAY-OUTS ON THE SAME SITE

In 1893 an improvement was effected by introducing a small outside balcony that gave facilities for drying, washing and the storage of refuse pails. It also gave ventilated access to the W.C. It was soon felt however that these buildings were too costly, and that by providing four flats to a stair on each floor considerable saving could be effected. In 1895 was evolved the plan of an inside corridor serving four flats per floor and across this corridor was a lock-up W.C. for each tenant and a communal scullery on each landing. This had hot water laid on, and shortly afterwards a bath was installed in this room for use of the tenants. No water was laid on to the flats themselves and a communal laundry was built for household washing. This, at the time, was considered worth while, since this block was part of a large scheme covering 20 acres. This type block was roofed with a pitched roof and the cost came right down to 9d. per foot cube.

In the Millbank tenements in 1899, Mr. Taylor achieved five flats per floor to one staircase, on the same lines as the former, but with a communal laundry with a copper installed on each landing above the ground floor in place of the central estate washhouse.

Mr. Riley was appointed Superintending Architect in 1898, and he considered the W.C. approach in the type plan so far evolved as unhealthy; consequently he evolved the outside balcony approach system to the various flats, the forerunner of that most favoured to-day.

The first schemes consisted of long outside balconies served off staircases at each floor level and these balconies ran regardlessly past bedroom and living room windows. Modifications were soon

made and a balcony past a living room window was allowed to remain as satisfactory, but bedroom windows on these public approaches were avoided. Improvements were then made to avoid passing the living room windows and we eventually came to such a plan as the recent scheme on the Shore estate at Hackney (Fig. 6).

Still further improvement was made to avoid one of the great difficulties of tenement planning—the satisfactory provision of laundry facilities. I referred some time back to the communal laundry at Boundary Street in 1895. This arrangement proved unsatisfactory owing to the estate being situated in one of the morally worst quarters in London, and it was alleged that the women, when at the tub, corrupted one another and caused trouble.

For years subsequent to this coppers were provided in each self-contained tenement, but no doubt at terrible cost to health. Those who study the causes of rheumatism hold that the drying of damp clothes in living rooms claims a large quantity of sufferers of this scourge and at the least predisposes them to it. It is only in the last year or two that the L.C.C. have tried out using the topmost storey of their tenements for laundry drying. It was realised that all the warmth of the building from the flues collected there and that outdoor facilities for drying were useless on more than one-third of the days of the year, and were then uncertain. A certain amount of bedroom space is sacrificed, but the amenities and improvement to health are well worth while. I may mention here that normally 7 ft. of washing line are allowed for each family and assuming five washing days per week this is equivalent to a

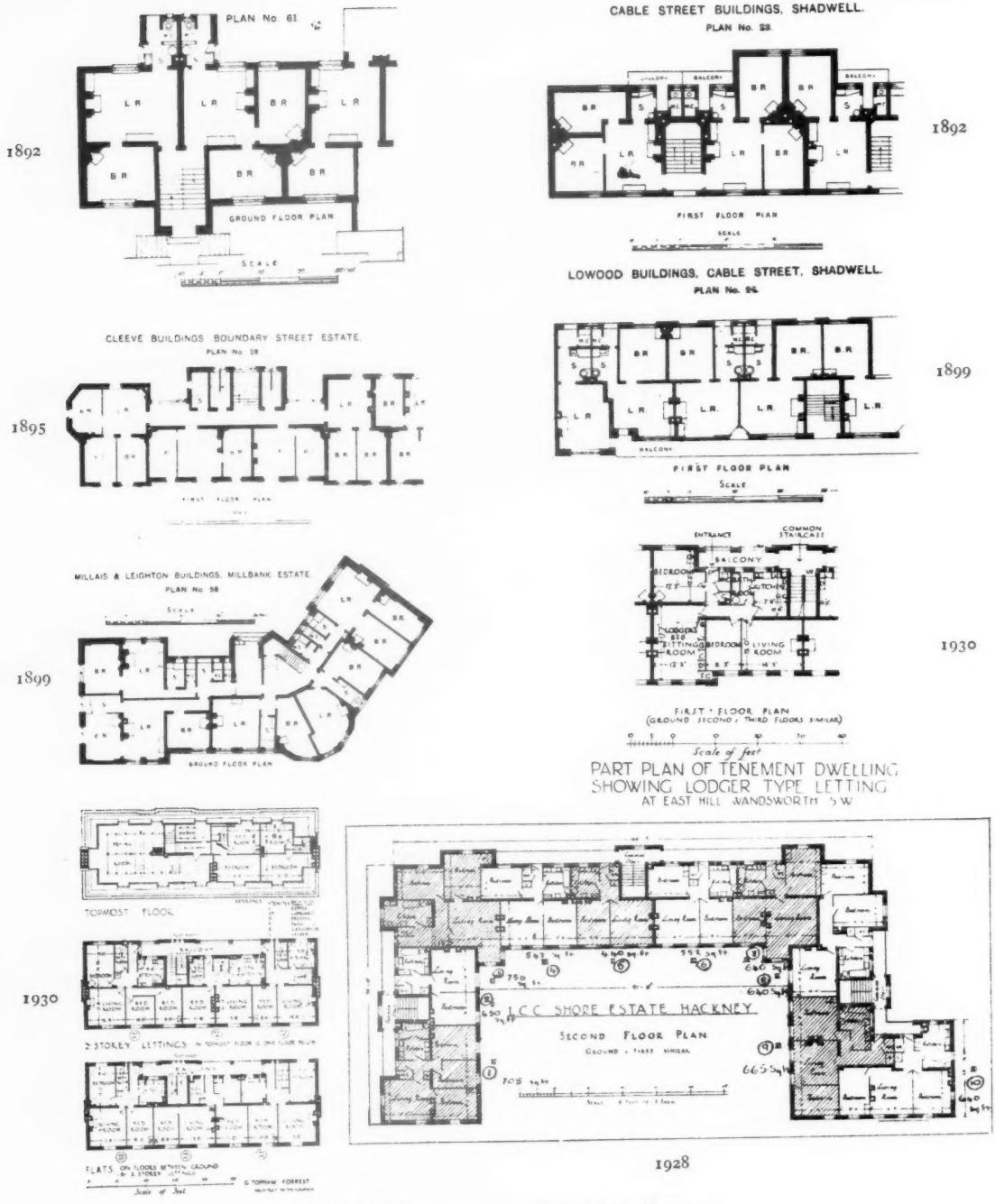


FIG. 6.—THE DEVELOPMENT OF THE L.C.C. TENEMENT

weekly 35 ft. per flat. Two to three washings can be dried in sequence in these roofs per day.

Occasionally a retrogression seems to be made to Mr. Taylor's plans of 1895, giving communal bathrooms and lock-up W.C.s and sinks across the corridors. The reason for them is a "decanting" one. In providing accommodation for persons in condemned areas, the L.C.C. have to justify the rents they charge being below their normal property rents.

As a further decanting requirement what is known as the lodger plan is adopted. It provides suitable bed-sitting room accommodation for lodgers in other people's flats. The bath and kitchen are shared, but a food cupboard and a cupboard to receive a fold-up bed are planned in the lodger's room.

In a publication on the model "Minimum house," produced last year by an International Society of Architects interested in housing and representing eighteen countries, one English plan of a Bloomsbury tenement was given among 99 foreign. It was incidentally crossed through and labelled "back number." In view of the evolution of the L.C.C. tenement that I have shown it is surprising and sad that so little should be known on the Continent of the best English work.

I was present last Christmas at the tail end of their annual meeting in Brussels, and Le Corbusier was advocating for tenements that all windows should be hermetically sealed and that what he termed "l'air exacte" should be pumped into the rooms so as to give the tenants the benefit of the purest air science could desire. He further advocated as a solution of the road traffic problem that roads should be made in place of approach balconies at every floor level. One may accuse such a Society of being mere pipe-dreamers, but there are among the representatives some clever practical men and the complete ignorance abroad of our high standard of housing appears really lamentable.

I was told that a short while ago a member of the L.C.C. Housing Committee complained to the architect's department that Vienna had gone so far ahead of us. The member showed a plan and photo of a Viennese block. The Architect identified the plan as being one sent by the L.C.C. to Vienna 30 years ago. Many plans in use in Vienna and considered as models to be followed would never be accepted in this country.

I now come to some views of tenement blocks for which Mr. Minton Taylor is responsible under the supreme control of Mr. Topham Forrest.

Here is the road front of the magnificent estate at East Hill, Wandsworth (Fig. 4) which has been built on land formerly occupied by almshouses of the Fishmongers Company. Much praise is due for this fine scheme. The buildings attain a close density—they are only 55 ft. apart, and constitute an important decanting scheme for condemned housing elsewhere. It is estimated that the trimmings, such as gauged brick arches, stone courses, etc., constitute a penny a week on the rent of each flat.

Owing to the closeness of the blocks to each other, all approach balconies were placed away from the road frontage, so giving a pleasanter look-out from all living rooms. The site falls very considerably from back to front and called for very skilful handling. The dark corners formed in each court contain the staircases. The four staircases connect up at the 3rd floor level and form alternative means of escape from fire.

In the blocks at Hornsey Rise all the balcony approaches have been put outside the courtyard. The brick walls are carried up an extra storey in the centre and the ground floor walls are thickened out to eighteen inches accordingly. The approach balconies have brick parapets and a facing of wall and window outside each staircase to break the draught.

The scheme on the Shore estate, Hackney, is extremely successful; it is carried out entirely in stock bricks. In the plan may be noticed the means adopted to eliminate the dark corners.

I finish reference to Mr. Taylor's work here with a detail view of the staircase and refuse chambers on the Shore estate (Fig. 7). Refuse from the various floors in tenement blocks is disposed of through letter box openings, and is conveyed down 12 in. glazed drainpipes to central chambers. A vent is carried up from pipe through the roof. The glazed pipe is cased in 4½ in. brickwork.

I have referred to the original nine-storey scheme for the Ossulston Street estate. The first buildings on the revised scheme have now been completed (Fig. 2) and purport to be an answer to the demand for Viennese flats in London.



FIG. 7.—SHORE ESTATE, HACKNEY.  
Detail of Entrance to Grendon House.

I think the lay-out is extremely attractive and the planning embodies all that is best on the L.C.C. lines, but I do not think the rendered walls are suitable to London. The neighbourhood is extremely dirty and for some reason we do not seem able to use cement rendering in this country without crazing. The trees are but freshly planted, but when grown up the court will be extremely pleasant.

Mr. E. Haden Parkes of the L.C.C. Architectural Staff was put in charge of the design. One may well praise the interesting grouping which has been achieved at no detriment to the planning of any flats themselves. An ideal not observed abroad. Mr. Parkes is responsible for most of the housing work at Downham and Becontree; he joined the L.C.C. in 1894.

I now show a few views of the Larkhall Estate, Clapham (Figs. 10 and 11). These are introduced in this paper since in accommodation they are similar to working class flats, though their finish is slightly better. Such accommodation, moreover, is all

that a large number of the middle class can afford. The scheme is an important one in being the first big private enterprise to provide, without subsidy, flats at a reasonably low rent to suit limited incomes. The scheme is due to the initiative and imagination of Sir Theodore Chambers. The estate originally comprised old Victorian houses, with well treed gardens. One quarter of the scheme has been built at present. The general planning and construction are based on the L.C.C.

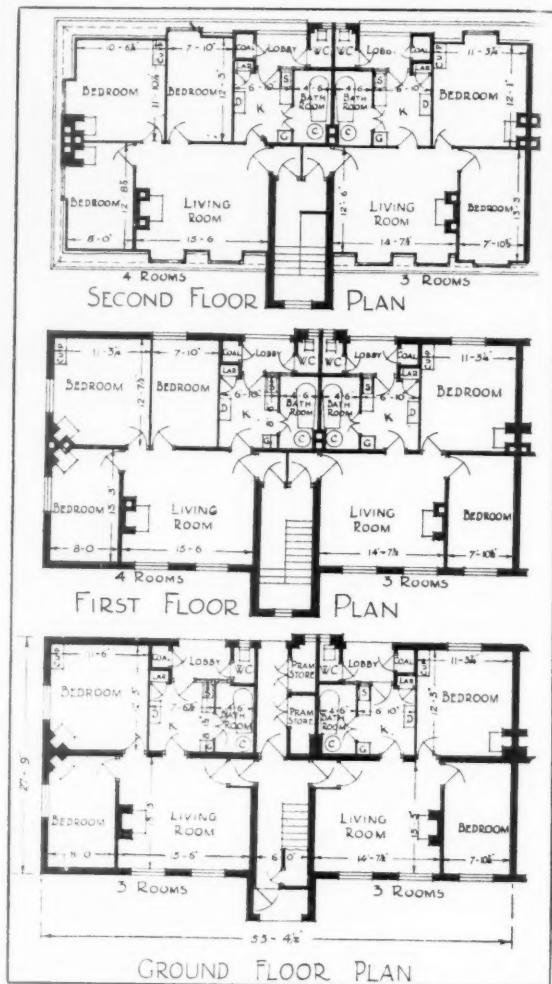


FIG. 8. L.C.C. THREE-STORYED FLATS, RAVENSCAR ROAD,  
THE DOWNHAM ESTATE, S.E.

Architecture.



Block from "The Architects Journal"

FIG. 9.—FLATS FOR LIVERPOOL CORPORATION. By Quiggin and Gee

lines with the exception of introducing two-storey flats at the first floor level. This was the same solution of the balcony approach problem as exercised by Messrs. Barnes and Davidge in their scheme for Limehouse.

Each of the five courts are arranged with two sides, N.E. and N.W., with balcony approaches, and two sides, S.E. and S.W., with living room windows to catch the sun.

The connection of the balconies at third floor level obviated the necessity for emergency stairs, and each block contains a central hot water plant fired by oil. Two small electrically equipped laundries were included in each of the first few blocks, but were not patronised by the tenants. The scheme as built was made possible by a 40 year loan by the L.C.C. on a valuation of 9/10ths of the cost. The cost of the buildings, exclusive of the gardens and site work but including the hot water, was 18s. 7d. per foot cube.

A block of three-storeyed flats at Liverpool by Quiggin and Gee is shown in Fig. 9. This city has done some excellent work under Mr. Keay, both in flats and housing. I do not quite agree with the passage planning in the flats and think that the L.C.C. Watling Estate, Hendon, type gives better value for the money.

Fig. 17 shows a very charming German example of a three-storey block.

I am not illustrating any Scandinavian flats, partly owing to time and partly to the fact that they help us very little in planning. The prevalence of the inside bath and water closet, especially the latter, makes their system inapplicable to this country. I must say, however, a few words about the serious effort they have made ever since the organising of the Housing Exhibition at Stockholm in 1930.

It was decided that flats and houses should be built without subsidy and let at rentals scaled to income. It was held necessary that every adult person should have his or her own bedroom—minimum size of rooms to be 96 sq. feet and rooms 8 feet 10 inches high. The parallel strip lay-out of blocks is favoured, set diagonally on the compass and facing a little more east than west, to equalise the solar heat. They favour high buildings and are putting up 12 storey blocks in Stockholm. It is maintained that high building costs less and that six-storey blocks cost more than four-storey blocks. Taking a rental of 8½ per cent. to 10 per cent. on capital cost the average flat costs 21s. a week against 18s. 8d. for the average house. The house for comparison is one built of timber with boarded exterior



FIG. 10.—LARKHALL ESTATE. View from the South.

and walls lined inside with their special cardboard. Lifts are estimated at £88 per annum for six storeys and £446 for twelve storeys to take six or seven persons. Such flats as they plan for two to three persons occupy only 387 sq. feet, cost £40 to £50 per annum exclusive of rates and consist of living room with two beds (or a bedroom with living table and two chairs), a small dining room with bed in it, a small kitchen with borrowed light, and a bath and w.c. with no outside window.

I haven't a very good word to say about modern Dutch flats. Their low standard is due to two main factors—one is that they are planned by speculative builders and not Architects, and the other is that the rating and loan systems all encourage poor accommodation and finish. To obtain building loans the façades have to be designed by qualified Architects who get paid £1 per yard of façade for

their work, and they have to make the best of the plans provided. The rating authorities assess their valuation on the standard of living of each tenant and the provision of a bath sends the rating up and the amount of loan down.

I saw some blocks in Amsterdam last summer, some eight storeys high. Each main stair was constructed of wood and was three feet wide and served two flats per floor. The floors throughout were of wood and there was no secondary means of escape from fire. The whole construction was extremely shoddy.

The façade of the flats illustrated in Fig. 12 was designed by Le Clerk who planted on the zig-zag balconies to give some character to the material he was provided with.

This is a block by J. F. Staal (Fig. 14) which shows the growing popularity of the shelter over the ground floor shops.



FIG. 11.—LARKHALL ESTATE: LOOKING ACROSS THE THIRD COURT

Germany has done a great deal of experimenting in housing since the war. She has produced some fine layout plans but she has not attained charm with much of it. The buildings are often so brutal or mechanised. This circular scheme at Leipzig (Fig. 1) is of interest, though much beyond the poor working man in cost. Most of the German schemes are working class flats for middle class rents.

The staggered plan such as has been used at Frankfort is adopted to get the maximum sun. Unfortunately it gets the maximum cold also, and the system is now unpopular for that reason.

The hit and miss German plan from near Hamburg (Fig. 13) is another attempt to capture the sun, but it fails for the same reason as the Frankfort one and is, of course, costly for outside walling.

It seems curious that the Germans with their

vast schemes in Hamburg, Berlin, Leipzig, Cologne and other cities do not organise their heating and hot water—no central systems are installed. Yet by organisation and standardisation the fitting up of their kitchens is exemplary.

Here is a view of one of the beautiful Vienna courts (Fig. 19). Swimming pools, sand boxes, recreation grounds, clinics and kindergarten schools are provided in some of this city's schemes. One may argue that the smallness of the flats themselves render outdoor life essential—baths are provided outside in most cases. At the same time a high standard of beauty is provided for the tenants and their children, and beautiful sculpture and craftsmanship is not withheld from them. The flat accommodation provided is below the standard that London would accept, however, for the working man.



[Photo: F. R. Yerbury]

FIG. 12.—FLATS IN AMSTERDAM: Architect, Le Klerk

The Karl Marx Hof recently completed, is the largest block of housing in the world, housing 5,000 persons. It is chiefly comprised of two room tenements.

In showing the English examples of tenements I realise I have omitted many important schemes, such as:—

Hortensia House, Chelsea, by Tubbs and Duncan; the Duchy of Cornwall Estate, by Adshead

I am limited for time, however, and all the above schemes are on a basis of staircases serving two flats to a floor. I feel that the balcony approach system evolved by the L.C.C. is a sounder development economically and gives a bigger field for achievement.

Since the L.C.C. Schemes are subsidised, and therefore their flats are not let at an economic rent, one may well ask whether it is possible for any private individual or public body to build working-class dwellings without subsidy. I would make reference to the St. Pancras Improvement Society, which is re-building the Sidney Street Estate, St. Pancras. This Society is working without subsidy and has shown a return of 3 per cent. on its money during the last few years.

On the Grosvenor Estate the Westminster Council has been working on more hopeful lines still. It has launched a housing scheme designed by Sir Edwin Lutyens, after doing a fair bargain with a private landowner to the satisfaction of both parties concerned, and probably Sir Edwin into the bargain. The landowner has been left with building sites of enhanced value as a result of the scheme and has, in return, made a substantial contribution

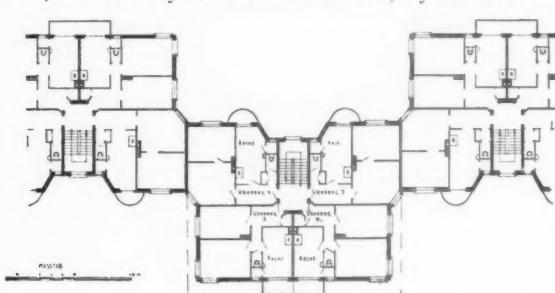


FIG. 13.

and Ramsey; the Marylebone Housing, by Ashley and Newman; and the Peabody Buildings, by Victor Wilkins.

to the City of Westminster. There are not many large landowners left, however, and the next step would appear to be a pooling of interests of smaller private owners and then a fair barter with the public

authorities. Enhancement of site value is something a landowner can afford to pay for and, incidentally, far better town and site planning can result.



Photo: F. R. Yerbury

FIG. 14.—FLATS IN AMSTERDAM WITH SHOPS UNDER FAÇADE.

Designed by J. F. Staal

### Vote of Thanks

The President then called on Sir Theodore Chambers to propose a vote of thanks to Mr. Wornum.

**Sir THEODORE CHAMBERS :** Mr. President, I esteem it a very great honour, as a complete stranger to the Institute, that I should be asked to propose a vote of thanks to my friend Mr. Wornum for the stimulating paper which he has read. It is a stimulating paper because he has thrown out, in a general way, what must recommend itself to this entire Institute of British Architects, namely, an enormous field of research and endeavour.

He has dealt largely with the question of tenements for the working classes, but to-day the question of apartments or flats has become a subject of universal class interest. You have a demand for types of dwelling of this character from all classes of the community, by reason mainly of two principal factors: one the domestic problem, which is having an enormous effect on living conditions, and may, in the end, lead to this class of life not only in the towns, but also in the provinces. And you have also the question of the confinement of areas and the necessity that people must live close to their work. This is, perhaps, of a more ephemeral character. And I would like at once to enter a caveat and suggest that this type of life, life in this class of building, is not the ideal life. The ideal life is that in the individual house, the individual place, in conditions which are conducive to a broad family life, giving the best possible conditions for the children of the family. Nobody can suggest that any form of apartment or tenement life is the ideal for the human race. We are bound to see, in the course of the next half-century, with transport facilities and means of communication opened up by science, a tendency to the de-centralisation of industry and a utilisation of the wide open spaces of the world for work and for living. And it may be that it will come on us with a great wave and produce a surprise to the world when it discovers that the conditions we have been accustomed to in the eighteenth and nineteenth centuries are purely artificial, and that it is easy to rid ourselves of the necessity to crowd tens of thousands of people in confined areas. Therefore, I think it is possible that the whole of this question of the development of the flat or the apartment or tenement will come down, in time, to be centred on the domestic problem of the convenience of the inhabitants. And here I think there is an enormous field for research for the younger generation, to tackle the problem from the more luxurious flat, which provides services for the whole inhabitants—feeding, cleaning, and all kinds of domestic service—down to the type in which the inhabitants do everything for themselves within their own self-contained

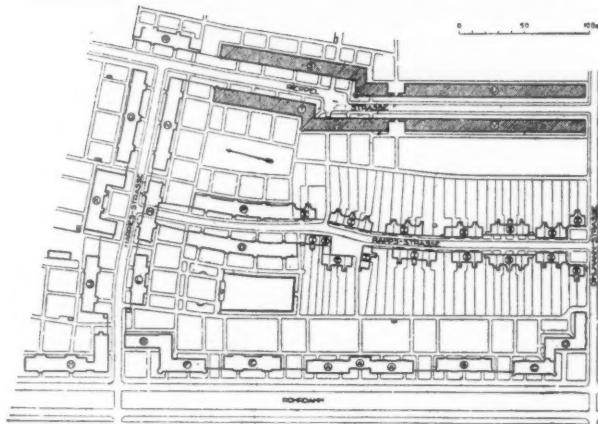
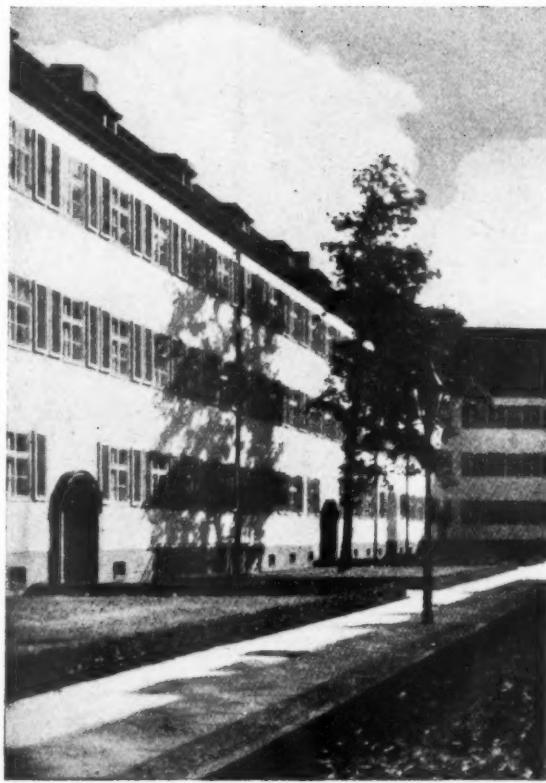
unit. This problem is one which should not be related only to the working classes, but should be related to the social conditions of all types of people, and should be studied individually in respect of all types. There are the types in which we want to concentrate on the kitchen, in which the wife will be working and in which she will be carrying out a large part of her daily duties. And the kitchen must be studied from every conceivable scientific point of view, for ease and comfort, and even beauty. We want to consider the bathroom, and bring every part to the highest point of comfort and decency while considering the general amenities of the whole living unit. As everybody must know who has seen some things which are called flats, in London and other cities, and who have studied the question of converted houses, houses which have been converted into flats, we are still living in astoundingly primitive conditions, and there is awaiting an immense field of research to produce more highly equipped scientific apartments and apartment houses.

We know that architects are hampered, over and over again, by restriction of the site within which they are condemned to fit their building. They cannot produce the best plan, the best aspect and the best lay-out, because of the artificial site conditions in which they have to work, and that leads to what Mr. Wornum has suggested, the inevitability in the future of linking up the study of building with that of town-planning: to obtain wider areas and larger spaces in which to develop the perfect article, the group of buildings which has a perfect design, and perfect internal economy. I see no reason why we should not in our towns of the future have dwellings standing in their own grounds equal in architectural value to the Palace of Versailles. It struck me when I was there the other day what a magnificent proposition it would be to have that splendid lay-out and position devoted to a great block of apartment houses. This is not in any way a super-ideal, it is a scale which may arrive within the lives of the present generation, who I trust may be able to deal with large spaces in an ample way, producing something satisfying to the eye, and which, worked out in its details, will be perfect. I suggest to the younger generation of architects that they should take up this question of the construction and design of flats, apartments, and super-flats, and super-apartments, as one of the biggest things to which they can turn their attention.

The individual house has been very fully developed. We can say that the small house, costing £300 to £400 and standing in its own grounds or semi-detached, has reached nearly the stage of perfection; but there is still an enormous amount of work to be

done to bring the apartment house to the same standard the individual house has reached. I think—and with this I am sure the architects to the London County Council will agree—we are still constantly restricted by the demands of the situation and size of the site. We must, however, realise that the people who ought to live in flats or tenements are people past the stage of bringing families into the world, and we should confine these buildings as far as possible to people who, for some reason, are bound to have limited families or no families. We should not conceive of tenements as the natural and permanent type of dwelling for the housing and the bringing up of families. I say regretfully that we have at present to devote too much time and attention to this type of dwelling for the working class; I would rather see more concentration on developing the flat for the middle class. The best thing we can do is to get certain industries out of London, and the workers connected with them out of London, too. Then we can tend, with a loosening of the closeness of the development of London, to build with wide open spaces, and have blocks of magnificent buildings, well set in their surroundings.

Mr. H. V. LANCHESTER [F.]: It gives me very great pleasure to second this vote of thanks to our Lecturer to-night; and I must say I have been extremely interested in the subject which he has placed before us, more particularly because I have made a close study of the Viennese work myself. I think the reader is a little unfair to Vienna in one respect, I do not suggest that the Viennese flats would be suitable for England: they are small and cramped, and they have no facilities, such as hot water or anything of that sort, which we give here in most of our flats. But they are very cheap, because the Viennese Municipality, having practically confiscated all the private property of Vienna, were able to use the money which they secured in that way to build these architecturally magnificent blocks of flats. The property rentals were fixed at pre-war currency values, which were very small, and then the authorities put a tax on the premises of 400 times the rent, still a mere trifle, and out of that tax they built these magnificent buildings, which have a fine development apart from the flats themselves. They have a very good laundry organisation, avoiding those difficulties which were mentioned with regard to the people quarrelling over their laundry work, because a set of laundry equipment is allotted to each tenant. There ought to be one day a fortnight for the use of the laundry, it is limited to one day a month, but this suits the occupants, and they sometimes get over the difficulty by two friends combining, thus securing one day a fortnight, in which they have command of first-class equipment, and they can do their washing in half the time which would be required under ordinary



FIGS. 15 AND 16.—LAYOUT AND VIEW OF SCHEME AT SIEDLUNG  
SIEMENSSTADT SHOWING INTERRUPTED ROAD  
Architect: Hans Hertlein

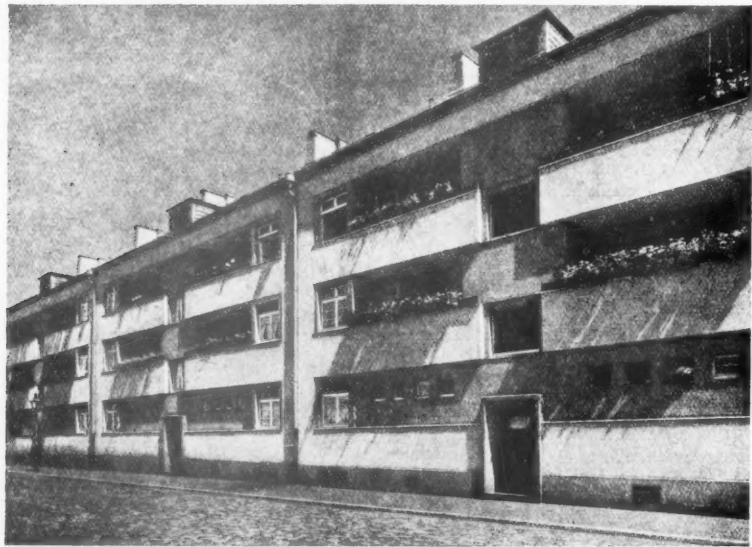


FIG. 17.—THREE-STORIED FLATS IN COLOGNE. (Plan below.)

conditions. These flats usually have a fine set of baths in each of the blocks. But the baths are not cheap, I estimated that to have one bath cost nearly half the weekly rental of a flat.

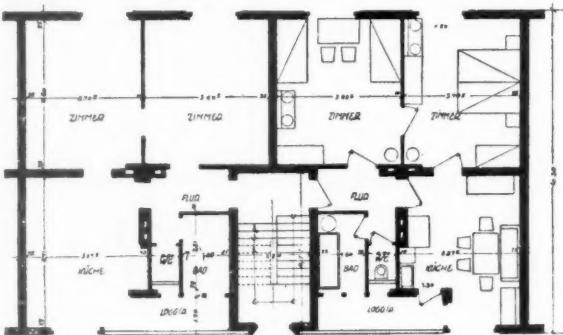
I sympathise with what Sir Theodore Chambers said as to our possible movement in the direction of giving every family a house. I have tried to do a little in that way myself. We were limited in what we could spend and the land we could allot, and we had "two flat" blocks, in which each man had his own garden. Both sets were entered from the ground level, one up a staircase, and another straight into the flat, and that system could be expanded by employing a flat maisonette on the upper floor. The first-floor man, with his separate entrance and his own garden, would go up the first-floor plus the semi-floor in the roof, which would give him 50 per cent. more than the man on the ground floor, and afford the necessary adjustment for people with families. That scheme would meet Sir Theodore's requirements and occupy less land than building independent houses.

I do not think the flat system will go as soon as Sir Theodore suggests. The attractions of living in a city still loom large in the eyes of our people, and I was surprised that one-third of the people with work outside one of our large northern cities come into the city to live. That shows we have still some length to go in regard to the people at large, before they will accept the gospel of living in the country instead of in cities. I do not think it has got hold of the working class section of our population as much as some of us

who are idealists would like to imagine. In that way there seems still to be a possibility for skilfully-designed flats ; and I agree that we should do all in our power to get these flats, with large spaces around them. I think some of these continental gardens in connection with flats—particularly in Vienna, where they seem to have a keener sense of beauty than in other parts—constitute a good example for us to follow.

I will not take up your time with further divagations on my part, but I heartily thank Mr. Wornum for what he has given us this evening.

The PRESIDENT: The vote of thanks having been moved and seconded, it is now open to any members and their friends to enter into the discussion, and I shall be glad if you will do so without being called upon. We have here people who are interested in the



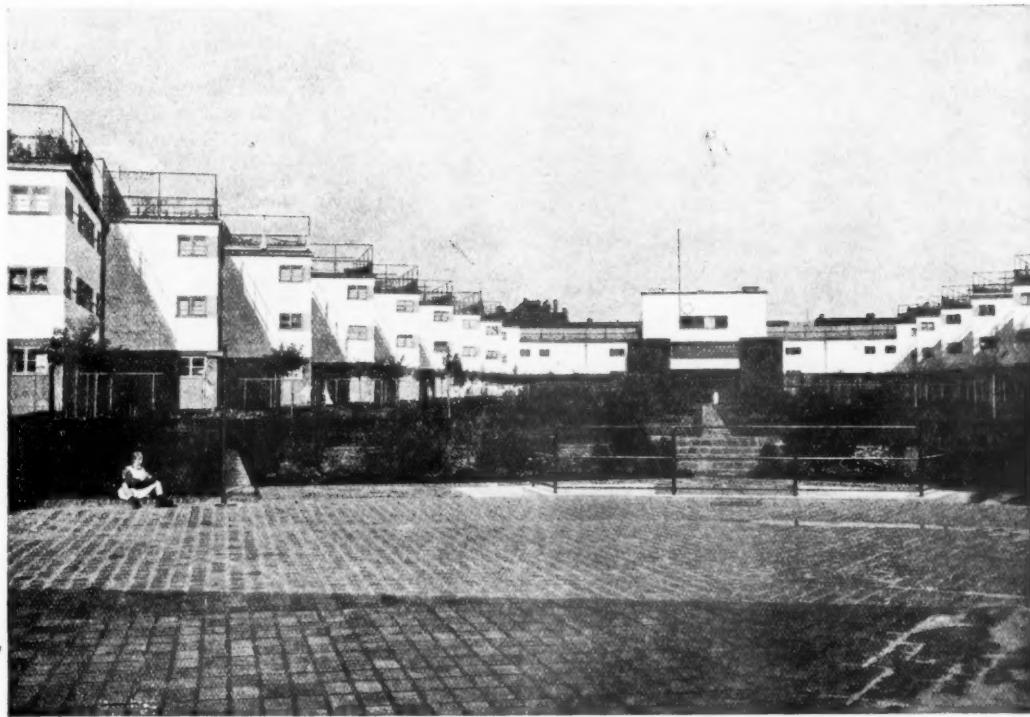


Photo: F. R. Yerbury

FIG. 18.—STAGGERED SCHEME AT FRANKFURT. Architect, Ernest May

subject: Mr. Minton Taylor, who has already been mentioned; Mr. Abady, ex-Mayor of Westminster; Miss Dorothy Crewe, the Secretary of the Westminster Housing Trust; Mr. H. Chambers, Surveyor to the Duchy of Cornwall; and many others.

Mr. JACQUES ABADY (ex-Mayor of Westminster): Since you mentioned my name, and since others more qualified to speak have not sprung to their feet, I venture to open the discussion, and to make one or two observations from what, I think, is a sane municipal point of view.

Sir Theodore Chambers has made some remarks placing in contrast with each other the ideas of living in the country in houses and living in a city in flats; but I venture to suggest to the meeting that the real origin of flats for working people and the impulse which will make for their continued building is an economic difficulty. If you have listened to Mr. Wornum's remarks, you will have noticed that both in his references to pre-war efforts—and very worthy efforts, too—of the County Council and other bodies, and the post-war efforts, he made constant reference to the efforts which have been made to reduce the cost of the flat buildings in relation to their rent. I think, Mr.

President, it is true to say that it was want of financial vision before the war that put a pressure on those who had to provide flats for working people to be driven to the money-saving devices in the actual lay-out and planning of their buildings, in order that the cost of the building would be able to accommodate a rental which would make a return—albeit a small return—on the capital cost, and make the scheme self-sufficing. And, of course, since the war that difficulty has been exaggerated in two directions: (1) The cost of building erections has increased enormously; and (2) there has been an obligation put upon those municipalities and others who have provided working-class flats to re-house people who have been cleared out of unworthy slum dwellings and surroundings, at rents which are governed by the rent levels fixed by the Rent Restriction Acts. So we find, unfortunately, that a system has come into being of subsidy. I want to put it to the meeting—and I am glad to take this opportunity of speaking as an ignorant laymen to well-informed architects, well-informed on this subject at any rate—that it is quite possible, if we take a different point of view and proceed on other lines, to obtain the necessary capital to enable flats of very much

improved types to be erected without there being either a drain upon the rates—that is to say, without there being a call for a rate-in-aid—or without their calling for a subsidy from the National Exchequer. Mr. Wornum, in his last slide, illustrated the Grosvenor House Estate, with which I had something to do, because—without mincing matters—I think I was responsible for the idea, under pressure of an emergency, to approach a landowner and suggest to him a scheme whereby a whole area could be re-planned and a contribution obtained from the landowner, on the basis of an assumed enhancement or betterment of that part of the estate which was not occupied by buildings necessary to re-house those who would be displaced by the improved layout. And the experience of that, up till now, has been this, that when the whole layout is completed—it will possibly be only another three or four years—the buildings which you saw depicted, which were designed by Sir Edwin Lutyens and which, though looking a little bizarre on the screen, will make a fine block, and have fine interiors, will cost the ratepayers nothing. What I want to suggest, because I think it is the architects and those who are engaged in town-planning who alone can bring this about, is that this kind of bargaining should be encouraged in every way, in place of the efforts which have been made by successive Acts of Parliament to dragoon owners of slum property into parting with their property; to try and have cleared sites, and to place upon those who have to provide dwellings the responsibility of finding the capital.

I do not wish to occupy your time, I therefore do not want to enlarge on the methods by which this can be done. Mr. Wornum has sufficiently indicated one profitable line of investigation, namely, a merging of interests of particular owners in respect of particular properties, so that their interests, both before and after the series of schemes for clearing undesirable dwellings, can be pooled, and a contribution can be made towards the cost of the merged schemes.

But there is one little "tip," if I may venture to give voice to it, and it is this, that I think it will be found that if one, in dealing with these areas, is drastic in closing streets which are really unnecessary, and handing back to particular owners in return for a contribution a cleared site of a paying size or area, because it would include the streets or alleys which have been closed, I think you will find it is extraordinary what an enhancement of value you can get, in almost geometrical progression. I mention this because I see Dr. Raymond Unwin is here, and I know the wonderful work he has done in the Ministry of Health in connection with town-planning. And I venture, from my unworthy position, to put this suggestion forward as being a fruitful line of investigation for the purpose of providing working-class flats without any cost upon the Exchequer or upon the ratepayer.

I am much obliged to you for mentioning my name, and to the meeting for listening to my few dry remarks. And I want to express my personal thanks to Mr. Wornum for the very stimulating lecture he gave us, imparting thoughts which lead in directions which are profitable towards a solution of what is one of the greatest problems in which we who are engaged in municipal affairs are concerned.

Dr. RAYMOND UNWIN [F]: I have very much pleasure in supporting the vote of thanks to Mr. Wornum for the extraordinarily interesting address he has given, and the illustrative series of slides. I would like to follow up what the ex-Mayor of Westminster said on the question of the importance of linking up the clearing of slums with the town-planning of built-up areas, for which we hope powers will be conferred upon local authorities in the Town Planning Bill which is now before the House, the second reading of which is to take place this week. What he has said is of the greatest importance; there is undoubtedly a great opportunity for clearing up the old-fashioned areas in the centre of towns by re-planning them; and thus adding great value to the whole estate, to such an extent that it may be quite worth while for the owner to make a handsome contribution towards the housing of the working-class occupants of the present unsatisfactory dwellings which are to be displaced by the improvement. It is only by looking at these problems broadly, by improving the areas through planning on a large scale, that the slum problem can be handled effectively. I am sure those who are acting for the London County Council would agree with me in that. Doing the best they can—and they have done extremely good work, as we have seen to-night—it would be infinitely better, and would lead to better results, if they could handle the problem through the planning of the whole area, and the improvement of the whole area, and take the re-housing of the people in the slums as part of a much larger problem, that of improving the town. We must face this problem seriously, it is a disgrace to our civilisation that we have so long allowed the survival of these out-of-date dwellings which are unfit for any decent family to be brought up in, to remain in our towns. And it is a problem which I hope we shall all tackle as soon as we have got necessary powers. Town-planning must be the basis. That secured, I hope we shall put our shoulders to that wheel and see if we can get all our town dwellings brought up to that minimum level of decency which would enable every family to have decent conditions in which to live, with comfort and amenity.

Mr. R. MINTON TAYLOR [L]: I would like, first of all, to pay my tribute to Mr. Wornum for the admirable way in which he has compassed so vast a subject in so short a time; he has covered the ground in a way that I should hardly have thought possible. Secondly, I should like to thank him on behalf of the Department with which I have the good fortune to be



Photo: F. R. Yerbury

FIG. 19.—FLATS AT VIENNA: GARDEN COURT AND OPEN-AIR POOL OF THE FUCHSENFELDHOF.

associated, for his very kindly reference to the work we have done. He has told you I was there in 1892, but if I had come later, others would have done the pioneer work ; it just happened that I was there early.

I shall not touch much on the economics of the question, indeed I am hardly competent to do so, but I will mention this one fact. Before 1914 the whole of the L.C.C. housing work was, economically, self-supporting. At that date money was obtainable at about 3 per cent. At the present time the work is not self-supporting, and money stands at about 5 or  $5\frac{1}{2}$  per cent. As far as I can figure it out as a commercial proposition, the L.C.C. housing work returns, I suppose, something like 3 per cent. ; for the remainder, the difference between 3 per cent. and  $5\frac{1}{2}$  per cent. has to be found by the State and Municipality. So much for the economics.

The flat is, no doubt, becoming increasingly popular with the working-class housewife, and, I think, for a very good reason. She finds that it greatly reduces the amount of her housework, and she has therefore more time to devote to her children and herself. And a flat is less expensive to furnish and keep up than a small house. Housework is reduced by there being less dirt brought into the house, for those who enter the flat do not come straight off the street. Also there are no stairs to keep clean, nor steps leading to a front door ; there are no back doors, and there are less windows to be looked after. Neither are there stairs to be climbed before the bedroom is cleaned out. The

second point about the flat is, that a much fuller use is made by the tenant of the whole of the accommodation than is the case in a cottage. In a cottage the bedrooms are upstairs, and they are hardly used, except for sleeping in, consequently they may be regarded as largely disused. But in the case of a flat, the bedrooms being on the same level, they are largely used during the day. They can, in fact, be regarded more or less as bed-sitting rooms for not only are they handy to the living room, but they are warmer. Our experience is that because of this more constant use the internal ironmongery, the door fittings, etc., have to be rather stronger than in the cottage.

There has been a considerable change in the habits of the people during the time I have been associated with the designing of flats. Twenty years ago, the working-class father and mother liked to use their living room as a kind of glorified kitchen ; that was their ideal ; but now, it seems to me, they prefer to use it as a parlour. And they have relegated their cooking into what used to be the scullery, in which they now have a gas cooker and a dresser and larder so that it has become a kitchen. That, with the general introduction of the bath, has modified considerably the design of the flat. In London, as it is now, there are comparatively few set meals taken in a working-class flat. Houses of business, and many work places, have their own canteens, and in many schools, too, there are facilities for feeding the children ; so that the amount of cooking done in the house in London is, comparatively, little.

People have to go great distances to and from their work, and they have no time to go home to their meals in the day-time. And that, as I say, has modified London working-class flat design. You may say that, on the whole, the larders are perhaps much larger than they need to be in the ordinary working-class London flat. Shops are handy, and much of the food eaten in the house is brought in ready cooked, and there is canned food, too.

May I dot the i's of one or two of Mr. Wornum's statements? The reason of the failure in the laundry experiment on a communal basis in 1896 in the Boundary Road Estate was this. It was not a failure as a laundry, it was an excellent laundry, and is still used as such, but it is chiefly used by women who take in washing. The ordinary working-class woman cannot leave her children while she does her washing outside; and neighbours do not want to be bothered with her children. If you have a communal laundry there must be attached to it a crèche. And that reminds us of the whole idea at the back of flat-planning for the working-class in England, particularly London, as against flat-planning elsewhere. You are up against the innate desire of the English working man and his wife to have a place of their own, a self-contained flat, and the L.C.C. flat designing is based upon that principle. You cannot get our folk to take advantage of any communal amenity. The nearest approach we can get to it is a common recreation ground, or an open space in which all the mothers and children can sit out in the air. And, as Mr. Wornum has told you, we have to remove the undesirable practice of drying the washing in the rooms of the flat, and this can be obviated by having a drying loft, which is used in rotation by the families for the five wash-days in the week.

In the L.C.C. flats we can claim that the lighting and ventilation are on a high plane. In the working-class flat you want perhaps an even higher standard of ventilation and lighting than in a middle-class flat, because working-class flats are more densely occupied. The density of population in these flats may be about one and two-thirds persons per habitable room; it is not so great in the middle-class flat. And with working-class people, too, there is continuity of occupation; seldom do these tenants spend more than an occasional week-end away from home; they have no long Summer Vacation, like middle-class people have. The way in which we achieve the ventilation is by planning the flat to run right across the house, from one wall to the other. The second thing we contrive is, that the front door of every flat should open directly into the fresh air on to a corridor-balcony; we have very few front doors which open on to a staircase. This means that children and infirm adults can enjoy the open air without it being necessary for them to descend to the street level; and that goes far to remove an objection to flats, from the aspect of child welfare. The principle on

which the balconies are now arranged is, that except for a second bedroom occasionally, the balcony does not cut across a living room or a bedroom. We endeavour so to face the buildings that the habitable rooms will be on the sunny side of the house, and we relegate the kitchens, the domestic offices and the entrances, to the non-sunny side.

As to the height of the buildings, we have found, as a result of years of experience, that under the London Building Act we generally get the best financial results out of a given sum of money, the best value, by building to five storeys; that is, four storeys in brickwork and a storey in the roof. And we have found that a lift is not a practical proposition, because the running cost imposes too big a burden on the rental, or on the rate-payer, to make it acceptable.

And then comes the question of how far, without detriment to health, you can ask people to climb stairs so as to reach their home. We have set a limit, and I think it is about right, because I have lived four years in working-class flats, and I have seen all sorts of people in them. Generally three floors above the ground floor is about the limit, especially for a nursing mother, or for young children. We arrange that, as was shown on the screen, by making three tiers of flats, and combining the two upper storeys into one, with living rooms on the lower part, and bedrooms on the upper, approached by private staircases. So you arrive at your home three storeys up, and then to go one more flight to the bedroom is no great trouble.

There was at one time considerable prejudice against the flat; they used to be called model dwellings, familiarly "the models"; "models," as a matter of fact, some of the old ones seem to have been practically models of everything they should not be. We have tried to remove that quite understandable prejudice by endeavouring, in the external design, to get away from the institutional look of the building, trying to make it appear more domestic and more homely. I think we have got some way towards our ideal. We have to do the best we can by selecting sound material, and getting our massing and our proportions decent and seemly. We cannot rely on applied decoration, sculpture, and so on, like they do abroad; we have not the funds for it, and, as I say, we have had to make the best of what was available.

Sir RICHARD PAGET: May I refer back to Sir Theodore Chambers? He made remarks which need emphasising, and especially to be remembered by the younger members—who have not yet spoken. The answer to the question: "What is the ideal flat?" depends on one's philosophy of life. You must decide what is the right kind of life to live before you design dwellings to suit that life. Sir Theodore Chambers thinks the flat is not the ideal because it does not lend itself to the ideal life. I think the flat should be considered a branch of the art of birth control. Those

who are content to be without children might live in flats, but to live together with children in a flat should be "indecent." You see what I am driving at. I think that all grown-up people are hopeless! You cannot hope or expect to alter anything in the generation of people who are of my age. But you can do almost anything in the way of improvement if you catch the rising generation and catch them young enough. My idea of the life worth living would be that of the human being in contact with Nature and in contact with the soil—with the chances of grubbing about when you are young and doing and finding things out for yourself. You cannot grub about in a flat, or if you try there will be trouble.

Therefore I do not believe in people having flats unless they have no children and do not intend to have any while they live there. I feel—and I am sure you all do—that the English flats have a dignity, a ducal, palatial look about them, which is absent in most of the continental ones. English flats have some decency in their way, but that they solve any problem of human life I strenuously deny. You should therefore first try to make up your minds how people should live. We have a long way to go before we invent a life worth living for our rising generation. I do not agree with Sir Theodore Chambers in one respect; I think the "house" as it has been devised for the family is still mediaeval; it does not take account of the greater part of the knowledge which has been accumulating as to what is good for the human race. There is no sign of facilities for sun-bathing, the bathroom (in particular) is not placed in the sun. Nature intended that air, light and water should go together. Therefore there is an enormous opportunity for freshness of outlook, making up your mind what is the proper life and what is necessary for the man, for his health and for making his life decent and happy. We are miles behind any animal in our standard of healthy living; we are behind many savage races in our philosophy of life, and we ought to be heartily ashamed of ourselves because of the unhealthy and unhappy way in which we still live, and try our best to live better in the future.

Mr. E. C. P. MONSON [F.]: As one who has had a considerable amount to do with the housing of the working-classes for the last twenty-five years or more I think it is a pity the last speech was made. This is not a propagandist meeting and we are not discussing over again the vexed question of the Flat *versus* the Cottage. It is not a matter of how we would like to live, it is how we must live and it is desirable that working people should live close to their work. They cannot afford either the time or the money for long journeys either way to get to it—hence the flat dwellings are necessities. We came here this evening to hear a paper on "Modern Flats" and it seems to me that the work which has been done by the London County Council and which has been put before us in such an

excellent way to-night by Mr. Wornum is deserving of the utmost praise. We are delighted to have heard it and thank him for all the time and trouble he has taken. It is very interesting, and has given us much to think about. Doubtless many here have seen this housing, and we know the good it has done, and is doing, for the people; those who have come to London and see these houses cannot, I am sure, go back and say we are a back number.

The PRESIDENT: If any of those present who have been unable to speak have anything to say, and will be good enough to send on their remarks, we can include them in the report of the discussion in the R.I.B.A. JOURNAL. It is sent to something like 8,500 people and you will realise that many more of our members will thus have the benefit of those remarks than those who have been able to attend this evening.

I am very delighted to say that I think this has been one of the most interesting papers we have had this Session. I happen to have had the opportunity of looking over the Larkhall Estate with Mr. Wornum, and I congratulate him and Louis de Soissons, his partner, on the excellent work they have produced there for Sir Theodore Chambers. It is an epoch-making building, in my opinion, and it is a type of structure which could be carried out in many large centres for solving the problem of housing accommodation for those with limited incomes.

The vote of thanks has been duly proposed and seconded, and I now put it to the meeting.

The vote was carried by acclamation.

Mr. WORNUM (in reply): Mr. President, ladies and gentlemen, I thank you very much indeed for the way in which you have received my paper, and I particularly thank the people who have contributed to the most valuable discussion afterwards.

There is a little story of a bit of repartee, which I thought Mr. Minton Taylor would repeat himself. When he was laying out the gardens of the Shore Estate, Hackney, and laid some turf down, a member of the Housing Committee came along and said: "I am sorry, Taylor, you are going to put trip fencing down this lawn, it seems unnecessary; can't we have labels 'Keep off the grass' instead?" Taylor replied, "Well, you see, the trouble is that dogs are so illiterate."

Sir Theodore Chambers and Sir Richard Paget have disparaged this idea of living in flats, and, as an epilogue, I shall give you a quotation from Anatole France, who in his *Monsieur Bergeret in Paris*, says, "To my mind the precision of modern houses reveals the daily function of the creatures enclosed in them as plainly as though the floors and ceilings were of glass. And all these people who dine one above another, play piano one above another, and go to bed one above another in a perfectly symmetrical fashion, when one thinks of it, they offer a spectacle both comical and humiliating."



RAMSGATE STATION. Architects: J. R. Scott and E. Maxwell Fry

## The Architecture of Modern Transport

### OPENING OF EXHIBITION AT THE R.I.B.A. BY MR. H. G. WELLS

*The President, Sir Banister Fletcher, F.S.A., in the chair*

THE PRESIDENT: Ladies and gentlemen, this Exhibition is the second of a series which has been arranged on new lines. The first, as some of you may remember, was the International Exhibition of Modern Commercial Architecture. It was held here two years ago, and it has since been shown in many of our large provincial cities, and has been seen, I believe, by upwards of 100,000 people.

The method adopted for these two exhibitions was for the Committee to decide beforehand what they wanted, and then to invite, or to obtain, the required illustrations from any source available, thereby ensuring the representative character of the exhibition. We architects are not exclusive; we are more than ready to recognise any work of architectural or decorative merit, whether it be by an architect or some other designer. In the case of the exhibits from the United States, these were chosen by a special Committee, appointed by the President of the American Institute of Architects, to whom our best thanks are due. We also desire to record our appreciation of the assistance rendered to us by the Railway and Shipping Companies and other bodies at home and abroad.

I am sure, when you have had an opportunity, presently, of looking round the walls, you will agree with me that this Exhibition of the Architecture of Modern

Transport is a remarkably fascinating exhibition, and that our cordial thanks are due to the Exhibition Committee, and particularly I should like to mention Mr. R. A. Duncan, the Honorary Secretary of the Committee. Mr. Duncan has been very largely responsible for the work, and he has put in a great amount of time and given a great deal of trouble to arrange the views which are on exhibition.

Now, ladies and gentlemen, we are very grateful to Mr. H. G. Wells for finding the time to come here to-day to open this Exhibition. I am sure you will feel, with me, that there is no one who would be more appropriate to the occasion. Mr. Wells, the great creative artist, is a designer of new worlds, worlds full of movement and activity, in which transport and communications play a vital part. In his "Modern Utopias" he says, "The tramway, the road, the culverts and bridges will all be beautiful things; there is nothing in machinery, there is nothing in railways and iron bridges and the engineering devices to oblige them to be ugly." How heartily do we agree with that remark! And upon these walls there is, surely, ample proof, if proof were needed, that in the hands of skilled designers all those things may, some day, be marvels not only of ingenuity, but also of beauty.

There is no need for me to introduce Mr. Wells to any world-audience, either in London or elsewhere ; his position is established, both as to the air, land and sea, in regard to modern transport. Mr. Wells' authority on world movement is so ubiquitous, so persistent, so penetrating, that only last night he was quoted by a leader-writer on "The Imbecility of Sign-posts." Mr. Wells, in complaining of the inconveniently narrow gauge of our railways, had declared that before every train trots the ghost of a horse. We certainly want the spirit of Mr. Wells to see our tangled traffic problem through to-day.

I have much pleasure in calling upon Mr. Wells to declare this Exhibition open.

Mr. H. G. WELLS, in opening the Exhibition, said : Sir Banister Fletcher, ladies and gentlemen, I wish that I could just declare this Exhibition open, and release you at once to examine the exhibits ; but custom dictates that, for a few minutes at least, I should make some wandering remarks before the Exhibition is opened.

Sir Banister spoke of your gratitude for my being here to-day, but the gratitude is all on my part. I find it a most exciting show, and to your Secretary's lifted finger I came quite eagerly to accept this opportunity of seeing the Exhibition and exchanging, if possible, a few ideas on this occasion, starting the conversation, so to speak, about the things that we are seeing. The most remarkable thing, I think, in the exhibits here, to anyone who is, like myself, getting on in years, is to mark the disappearance of tradition from architectural forms. That disappearance has been extraordinarily rapid. You have here, somewhere, a photograph of the great arch outside Euston Station. That marks almost the first impact of architecture upon railway transport, and the whole thing is traditional. A great arch is made, through which you might very well have elephants and camels and mules coming, and the ruling idea is the idea of a walled city of the past receiving transport from the desert or open land outside. The idea that that railway was going to react and destroy the distribution of the population and abolish cities which would have great entrance gates and that sort of thing, does not appear there at all. The extraordinary freedom, the release of form, the disappearance of any sort of traditional style since that early Euston phase, are the first things that strike us in this Exhibition.

Remarkable as this Exhibition is, I think that in the course of ten, fifteen, or twenty years people will discover that what is shown here to-day was merely a collection of hints and intimations and promises of things that are rapidly coming upon us ; for instance, the abolition of materials like stone and brick, with certain determinate conditions in their use by an enormous variety of cements carried on steel frame-

works, is the first developing thing to note. The next is the appearance, for the first time in human experience, of translucent and transparent materials. They are being very timidly used at present in what you will see here. And, thirdly, a thing which appears here particularly in the Underground Stations and that sort of thing, is the modest beginnings of an architectural use of controllable light. Architecture, until recently, was always done in relation to sunlight. There was the sole illuminant passing across the sky, and the whole structure had to be considered in relation to that. But now we have come to a time when, for instance, in the case of a theatre, you can have a building of no importance during the day—you can make it of no importance during the day—and by a system of artificial lighting you can light it as you will. And here there are as yet hardly any photographs of buildings designed primarily in relation to such things as flood lighting. But lighting is becoming a material for architecture. An enormous amount of artificial light has become available for the architect and instead of having something which burned and which had to be put on a stand and placed in relation to non-inflammable material, you can have anything you like now with powerful lights. If I were a young architect I should avoid jobs which had to appear in the open air ; I should like to concentrate upon interiors, upon Underground Railway stations, Tubes, passages, underground restaurants and theatres, etc., in which one could do absolutely what one liked with light for the first time.

When I look at the things you have here, and think of the things which they promise, building in transparent material and material which you can throw into almost any form and light in almost any fashion, I cannot help feeling we must be in the dawn of an Age of Architecture. But you are not only now capable of these developments, but economic and social forces are making it necessary that they should occur. Architecture is not only opening up enormous possibilities, but I think architecture is going to be almost compulsory upon the world in the time that is coming. Unless the next few decades are going to be an age of social collapse—which is highly improbable—I think we may almost certainly say it will be an age in which the architect will be the most significant and the most interesting of all men. I happen to have been spending a good deal of my time, the last year or two, in trying to puzzle out certain relationships in economic life. I am enormously impressed by the fact that what we used to consider were the necessities of mankind are being produced by a smaller and smaller proportion of active workers. We have a growing mass of unemployed people for whom employment has to be found. I do not believe that any sort of private market, any sort of individual buying, will ever take up the

slack of economic life again and employ the masses which through no fault of their own are coming out of work. Absolutely new forms of employment have to be found. And the obvious thing, plain as daylight, it seems to me, is that we have to undertake immense architectural enterprises ; we have to accept this possibility of re-housing all mankind, of re-building every city in the world, re-planning the roads, the countryside, and the whole lay-out of human life. It is not a Utopian suggestion I am making, it is a plain necessity. If we do not get over in some way to an enormous collective enterprise of that kind I can see nothing for it but social disaster. And so, as I think there is too much common sense in humanity to go smash, I think we can look forward to a time when towns will re-build themselves, just as now we go to the tailor's for a new suit of clothes ; when people will no more dream of living in houses fifty

or a hundred years old, in haunted houses in which unknown people have died ; which is still for many of us a normal thing, we think nothing of living in a house which is a hundred years old. That sort of thing will pass rapidly out of people's minds, and re-housing and re-building will become as normal an occupation as seed time and harvesting every year.

I have just put that idea before you because it was necessary for me to say something on this occasion, but here is the Exhibition, and that is what you are gathered together for, and to that I now direct your attention.

The PRESIDENT : I am sure you will like me to express our great delight in having Mr. Wells here, and also to thank him for his short, but very illuminating, address on the possibilities of the profession to which we have the honour to belong.

Amongst those who accepted invitations to be present were :

The Mayor and Mayoress of Westminster ; Lord Ashfield ; Lord Dawson of Penn ; Lord Moynihan ; Major-General Sir Fabian Ware ; Professor Wagstaff ; Sir Warren Fisher ; The High Commissioner for the Irish Free State ; Colonel T. H. Minshall ; Mr. Noel Sheffield ; Mr. R. H. Wilenski ; Mr.

Louis de Soissons ; Mr. G. Grey Wornum ; Brig.-General Sir Magnus Mowat ; Mr. Algernon Ashton ; Mr. R. D. Blumenfeld ; Mr. and Mrs. C. J. Kavanagh ; Mr. C. E. R. Sherrington ; Mr. R. Coppock ; Mr. Alec Tweedie ; Major R. F. Maitland ; Mr. Harold Stabler ; Mr. Gilbert Bayes ; Sir Francis and Lady Goodenough ; Sir David Owen ; Mr. C. R. W. Nevinson ; Mr. H. G. Griffin.



Photo : F. R. Yerbury

POWER STATION, ROTTERDAM

## A REVIEW OF THE EXHIBITION OF THE ARCHITECTURE OF MODERN TRANSPORT

BY JOHN DOWER, A.R.I.B.A.

To illustrate the Architecture of Transport in the widest sense of both terms was the best possible choice that could be made by the R.I.B.A. Exhibitions Committee for the second instalment of their new exhibitions policy. For the policy itself no praise can be too high. That successive exhibitions should cover wide fields of modern design in photographs of uniform size; that they should be of international scope; that, after first presentation at the R.I.B.A. they should go on tour to be shown to tens of thousands of people at other centres all over the world, and collectively remain permanently in being as a pictorial library of architecture for loan and reference: this is a large and imaginative conception of architectural education which, vigorously executed, cannot fail to widen the knowledge and raise the standards of hundreds of thousands of people. It was clear that vigour in execution was not lacking at the first venture of two years ago in the exhibition of Modern Commercial Architecture; the present exhibition shows still greater vigour and sureness of purpose.

Transport buildings were the best possible choice for a number of reasons. In no field does the epithet "modern" imply a more revolutionary set of changes and a clearer break with the past. Of the needs which transport buildings of to-day are asked to satisfy not half existed in 1900, not one hundredth in 1800. It follows that in no field are designers more free from the limitations (whether we regard them as props or as millstones) of tradition and dogma; their problems must be solved by scientific knowledge, by unfettered reason, by fresh imagination. Further, no field shows more clearly the chaos that results from disorderly unplanned development, or holds greater menace to all that is of most value in life if it be not controlled and humanised to a justly balanced efficiency by architectural planning in every detail. In no field can the work of architects be of more value to the community; but in none is it more necessary that architects, town-planners, engineers and all other classes of designers should work together in intimate co-operation from start to finish. Lastly, in no field is a vigorous economy more essential. The size and cost of individual structures, still more of whole systems worked to a single master-plan, are already huge and will be many times larger still in the near future: but there will be no surplus of money and there must be no waste of material. Where nearly every detail is to be repeated hundreds or thousands

of times, there is no place for the smallest thing that is useless, meaningless or unnecessary. In this respect, the vehicles of transport (examples of which are very wisely included in the exhibition) point a definite lesson for its architecture. The clear-cut precision of aeroplane and car should be reflected in control tower and filling station. The power house should correspond to the delicate austerity of its dynamos. Beauty must be achieved through simplicity of form and breadth of effect, through moulding of the thing itself, not through the dressing of it in ornamental clothes.

It is impossible to avoid the feeling, after a view of the photographs exhibited, that the architectural opportunities offered by Modern Transport have, as yet and in the main, been more surely seized by continental and especially by German architects than by their British and American rivals.

Here "the battle of the styles" is still with us, and "applied architecture," though dying, dies but slowly. Broadly, the public gets the buildings that it wants. Its bricks and mortar are a faithful reflection of a nation's fundamental standard. British architects will remain hopelessly handicapped, so long as the popular taste thinks of them as men to be called in to put a traditional or "novelty" trimming on structures designed (or not designed) by other people. American architects, one may add, will be almost as hampered, till their clients can be purged of the self-advertising bombast and sentimental antiquarianism that dominate their building projects. The biggest, most ingenious and most expensive, though perhaps not the finest, examples of every historic style from Doric to l'Art Nouveau are to be found in the twentieth century monuments of American plutocracy. Their railway stations are in the full flower of French Palladianism; their aerodromes translate the Spanish Mission style to yet more picturesque though secular uses.

On the Continent, by comparison, partly perhaps because the war of 1914-1918 was then of far more shattering and revolutionary effect, tradition has been relegated to a limited field of indirect allusion, new methods and materials have been studied with open minds, "styles" seem largely to have been forgotten, and out of new purposes new style is slowly but firmly evolving. There is no lack of English and American architects as skilful as those on the Continent, as ready to accept new materials, as capable of direct expression of mechanical and economic needs,

probably more sensitive to corresponding human needs ; but they await wide public demand for and appreciation of their work.

The new architecture, as Mr. Wells justly said, in opening the exhibition, is still at the stage of tentative experiment, and nowhere more so than in the buildings of transport. It has infinite variety and, at first sight, much inconsistency. But certain broad directions and characteristics may be remarked. The supposed distinction between engineering and architecture, between things that ought to be merely useful and things that ought to be merely beautiful is abolished. Town-planners and architects have the same function ; they operate and should co-operate in a single scale of values which must embrace the consistent planning of rooms, houses, streets, cities, regions, countries. Whited sepulchres are condemned. Backs and sides of buildings are to be given the same care as fronts : the elaborate façade to a shoddy structure and a dirty backyard will happen no more. The platforms and offices of a railway station will be made as attractive as the main entrance. The remotest signal-box, bridge, level-crossing or goods-yard will be studied and planned as precisely as the passenger terminus. Ornament, sculpture, wall-painting will be used sparingly, placed at points of true emphasis and where they have relevant meaning. Every individual building will be related to surrounding buildings and to its site, and subjected to the limitations, of a master plan. Component parts will be increasingly standardised and the balance in the architect's work thrown from detail to mass. Colour and light will play a wider and more exactly controlled part in design, and proportion and form will be given always their full three-dimensional significance.

Transport falls naturally into four divisions—rail, road, air and water. The exhibition suitably divides on much the same way, and all four branches are adequately represented both on their buildings of varying kinds and sizes and in their vehicles. A fifth and most interesting division is composed of the power, transformer and control stations which form the logical centres of all electrical systems of transport and a feature at least of transport of every kind. A further section is devoted to bridges.

Of British railway work, that of Adams, Holden and Pearson, now widely distributed over the London Underground system, is outstanding. The smallest details of their work—signs, light standards, ticket machines, etc.—are as thoroughly and admirably designed as the soaring bulk of their new headquarters offices above St. James's Park Station. Standardisation of parts and motives is a prime feature of their designing ; a strong self-advertising value, a ready recognisability and a marked individuality embracing

everything in the system are thereby secured. But each station is separately shaped or reshaped with a brilliant fertility of imagination from its site, its existing works and its requirements. Standardisation of parts has nowhere brought dullness of iteration in its train. The finest and most ingenious of all is at Piccadilly Circus, where the difficulties to be overcome before so simple a plan could be so gaily treated must have been enormous.

Fine new stations on the East Kent and other lines of the Southern Railway are also exhibited, of which the Ramsgate Central Station by J. R. Scott and E. Maxwell Fry is outstanding for simplicity and dignity of treatment. There is little else to show for railway work in this country ; indeed little else would be worth showing. We have suffered, as pioneers must suffer, from every possible misdirection and mistake. All our largest towns were fully equipped with stations in the worst age of architecture, when the divorce between art and engineering was most complete and when no one apparently understood transport planning at all. Smoke and dirt have soured whatever merits our stations once had, and there is no capital available for a fresh start. However, the stimulus of electrification will sooner or later work wonders.

More recent development has given a much better chance to many of the great cities of Europe. The massive strength of the entrance façade and firm simplicity of the interior of Stuttgart railway station (Paul Bonatz, architect) are shown in several fine photographs. Another group illustrates Eliel Saarinen's fine station of Helsingfors, with its huge arched entrance flanked by four colossal male figures, and its splendidly proportioned clock-tower. A very satisfactory smaller station is that of Meissen in Saxony (Wilhelm Kreis, architect) and there are several workmanlike stations, signal-boxes, etc., from the already completely electrified Swiss State Railways, which have probably a higher average standard of building and equipment than any other system. The suburban electric railways of Berlin and Hamburg (like London's, partly "underground" and partly "above ground") show a great deal of fine work. The Krumme Lanke Station, Berlin, by Alfred Grenander, is particularly strong and well proportioned and arranged. Several examples of platform treatment are included, but none quite achieve a satisfactory architectural effect from their severely utilitarian simplicity ; the problem has been better tackled at some of the newer French country stations with light, well-designed steel trusses, left quite unadorned and of an obviously standardised pattern ; but no example of these is exhibited.

Aerodromes and bridges we may pass over more summarily since the former were the subject of a

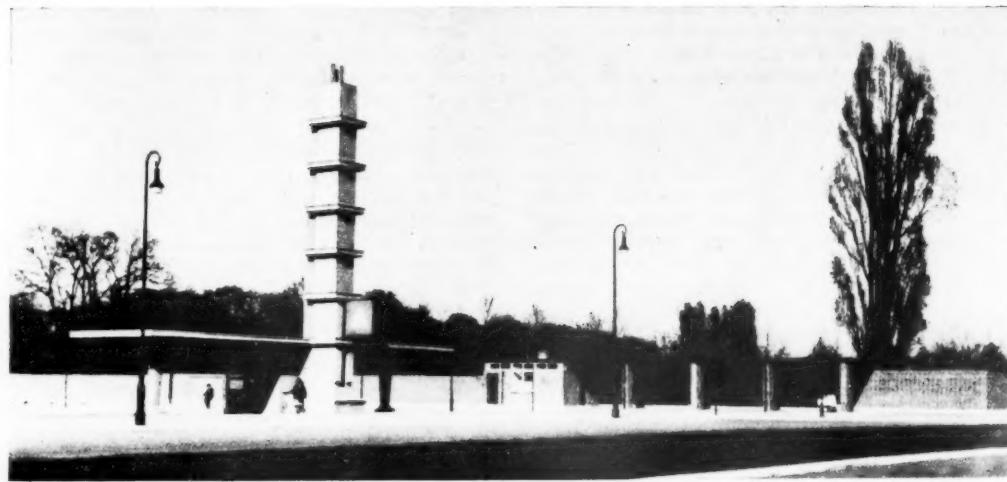


Photo: J.D.

APPROACH ROAD AND SHELTERS: TEMPELHOF AERODROME, BERLIN

recent article in the *JOURNAL*,\* and the latter are shortly to be covered in detail in Mr. Maxwell Ayrton's paper on Modern Bridges. Continental aerodromes are fairly fully illustrated; and, if the unprecedented and rapidly changing nature of the requirements involved be taken into account, the achievements of the architects and engineers concerned must be rated very highly. Of aerodrome "station" buildings that of Hamburg designed by Dyrssen and Averhoff is outstanding, with an elevation towards the flying-field of splendidly massed restaurant and sight-seeing terraces. Fine hangars are those of Berlin and Lübeck-Travemünde. Only one English aerodrome has been considered good enough for such company, that of Heston, Middlesex; its large bow-roofed concrete hangar, though original and striking, is not a complete success elevationally, but the small club-house (L. M. Austin, architect) has a very direct and pleasing appearance and the lay-out is sound and straightforward. Examples of American airports are probably not fully representative; but from those shown it may be judged that, while in size, quantity and engineering ingenuity America is or will soon be supreme, in architectural merit she is as yet far behind the Continent.

The bridges form a very fine collection from many countries and of all shapes and sizes, ranging from the vast steel arch of the recently joined Sydney Har-

bour bridge to the delightfully varied little canal crossings of the streets of Amsterdam, with their charmingly moulded and patterned brickwork, freely sculptured stone abutments and finely ornamented metal railings. The bridge work of Sir Owen Williams and Mr. Maxwell Ayrton is outstanding among British examples, the polyhedral massing of the Crubbenmore bridge on the Inverness road being the freest, boldest piece of design in the whole exhibition. Bridge construction has its own long and noble traditions; new materials, though they have made possible additional forms and vastly greater spans, have not changed the essentials of design. The Pont du Gard could be placed beside all these recent structures without looking out of place.

Among the canal and other water-transport buildings, the splendid massing of towers and bridges over the locks and weirs of the Neckar Canal near Mannheim (Paul Bonatz, architect) overshadows all the rest. Here are engineering works of complete and stark simplicity moulded to dramatic form and unity by a masterly sculpturesque touch.

The special group of power stations and the like, already mentioned above, shows several fine examples from Germany and Holland: buildings at Rotterdam, Cologne and Berlin in well-massed solid brickwork are all of the first class. Corresponding British work is dull and heavy with irrelevant classic detail and without even the merit of solidity.

The section devoted to roads is large and varied.

\* "Some Aerodromes in Germany and Holland" (4 April 1931).

The most ubiquitous road building is the filling station, and, after the hundreds of eyesores that disfigure every British road at frequent intervals, it is good to find exhibited a score of British and foreign examples of sound design and tolerable, if not beautiful, appearance. For the open country simple, unobtrusive designs, as far as possible in local materials, are the obvious need, which stations like those at Dorchester, Hamilton (Alexander Cullen) and Popham Lane, Hampshire (Cancellor and Sawyer) have broadly satisfied. The more sophisticated but finely composed station at Esher (Imrie and Angell) is well suited to the heavier traffic of its main arterial road. The pumps, usually a blatant display of ugly shapes and crudely contrasted colours, are admirably concealed without loss of efficiency.

From Germany and Holland come a number of excellent examples of the smaller street appurtenances

of towns. Concrete lamp-posts, traffic control boxes, waiting rooms, enquiry bureaux, telephone boxes, small "island" filling stations are all of simple and efficient design. The lay-out, with light pylons and shelters of the road approach to Tempelhof Aerodrome, Berlin, is especially clean, open and well-spaced. The whole of this class of road buildings is crying out for better and more standardised treatment by architectural designers, and nowhere more than in the larger English towns. Satisfactory illustration of the larger town garages has proved very difficult. The essence of good work in such buildings is planning, and cannot be properly shown in photographs. Many excellent plans have been evolved and executed in America (where the demand is far greater), in France, in Germany and here; but no elevational treatments of any striking merit seem to have resulted from them.

## Architects (Registration) Bill, 1931

### REPORT STAGE AND THIRD READING

*Communicated by C. McArthur Butler, Secretary of the R.I.B.A. Registration Committee.*

As indicated in the report of the R.I.B.A. Registration Committee (R.I.B.A. JOURNAL, 18 April 1931), the Bill, as amended in Standing Committee A, was set down for Report stage and Third Reading in the House of Commons on Friday, 17 April.

The first of many amendments on the Order Paper was one to define the term "Registered Architect" as meaning

a person registered under this Act in respect of the business of designing structures and the supervision, in his capacity of designer, of the erection of structures,

This aroused considerable discussion, and Colonel Moore, M.P., was able to convince the majority of those present that it would be unwise for Parliament to assume responsibility for such a definition, and on a division the amendment was rejected by 107 votes to 35, a majority of 72.

At an early stage of the proceedings the Speaker drew attention to the large number of amendments on the Order Paper, covering nine pages, and indicated that as the Bill had been very fully discussed in Committee he could not allow a debate to be repeated on the Report stage, and would have to refuse to accept a great many of them, but he understood that the promoters of the Bill were prepared to accept a considerable number of amendments.

Some of these were drafting amendments, which were agreed without discussion, but others gave rise to a debate which lasted for four hours. One of these was a proposal by Mr. G. Wilson (Cambridge University, U.) to include in Clause 5 (b) a proviso recognising the examinations of any University in Great Britain and Northern Ireland. Miss Rathbone (English Universities, Ind.) expressed the opinion that the Bill would be better without the amendment, and other speakers, though for different reasons, came to the same conclusion, and eventually the amendment was by leave withdrawn.

The next amendment of importance was to delete Clause 7, and was the occasion for a renewal of the attack made in Standing Committee A on the Board of Architectural Education, in the course of which the charges then made against the R.I.B.A., of its intention to use the Board as an instrument for recruiting the membership of the Institute, were repeated. The chief supporters of the amendment were Mr. Winterton (Loughborough, Lab.), Mr. Kelly (Rochdale, Lab.), Mr. McShane (Walsall, Lab.), and Mr. Stewart (Belfast S., U.), who represented the Institute of Builders. Lieut.-Colonel Moore (Ayr Burghs, U.) ably defended the retention of the clause, and was supported by Mr. Bracken (Paddington N., U.), who described the amendment as a wrecking one, and Mr. Holford Knight (Nottingham S., Lab.), and other sympathisers. Sir M. Macdonald (Inverness, L.) sug-

gisted a method by which he thought the views of both sides might be met, and on a division the retention of the clause was carried by 169 votes to 54, a majority of 115.

An amendment moved by Mr. Bracken, and accepted without demur, provided that not less than half of the amount received by the Council annually in fees should be devoted to providing scholarships and maintenance grants for the assistance of students of inadequate means. On the motion for the Third Reading, Mr. McShane expressed the view that the retention of Clause 7 would mean that many people, particularly those who came from poor homes, would be shut out of the profession. That, in his opinion, was the only flaw in the Bill, but he was glad that the architects were now to have the same right of registration as he claimed for himself (Mr. McShane is a member of the teaching profession).

Lieut.-Colonel Fremantle (St. Albans, U.) said that in his opinion the R.I.B.A. had made a mistake in requiring registration, and the State would make a mistake in registering anybody, unless it was necessary from the point of view of life and death.

Mr. Winterton, speaking on behalf of those who had been critical of the measure, said they had only one object in view, the protection of the interests of the public and

the keeping open the door as wide as possible for every working-class boy and girl to enter the profession. He paid a tribute to the uniform courtesy displayed by the Member in charge of the Bill, Lieut.-Colonel Moore (Ayr Burghs), and congratulated him on the successful carrying through of a very difficult and complicated measure.

The question was then put and agreed, and the Bill was read a third time and passed.

Thus has the R.I.B.A. completed within six years, so far as the House of Commons is concerned, the work commenced forty-one years ago by The Society of Architects, whose former members will gratefully recognise and appreciate the ceaseless efforts culminating in this great achievement, by a body to which they transferred their allegiance in 1925 with every confidence that the pledge then given to them would be redeemed if humanly possible.

#### THE REGISTRATION BILL IN THE LORDS.

The First Reading of the Registration Bill in the House of Lords was given on Tuesday 21 April.

## Correspondence

### VALUATION OF DAMAGES IN ANCIENT LIGHT DISPUTES.

St. Pierre,  
Mount Ephraim Road,  
Tunbridge Wells.  
20 April 1931.

To the Editor, JOURNAL R.I.B.A.,—

DEAR SIR,—The correspondence in the JOURNAL relating to the above subject has been of considerable interest to those of us who have had to deal with Ancient Lights disputes, and is helpful to a certain extent in arriving at the measure of damage.

Circumstances and conditions, however, are so varied and diverse that any particular formula cannot, in my opinion, be adopted generally.

I have had to decide quite a number of cases in my time and have settled them in various ways.

One basis of settlement which I adopted, which was accepted by legal representatives of both parties and might apply in many cases, was that of capitalising the annual cost of artificial lighting required to equal the diminution of daylight. The premises in question was a showroom including a small office, a part of which only was affected by the erection of the servient building. This method, of course, would not be appropriate in all cases, I admit.—Yours faithfully,

HENRY ELWIG.

*We regret that we are unable to publish any further letters on this subject. Should other correspondents wish to express their views their letters will be forwarded to the Practice Standing Committee.—ED.*

### SIR BANISTER FLETCHER, P.R.I.B.A.

Mr. Frank C. Baldwin, in thanking the R.I.B.A. for greetings which were sent to the American Institute of Architects during their Annual Convention, states that the American Institute has conferred Honorary Corresponding Membership upon Sir Banister Fletcher, P.R.I.B.A.

### MR. W. CURTIS GREEN, A.R.A. [F.]

Mr. William Curtis Green, A.R.A. [F.], has been elected by the Committee of the Athenaeum to membership under the provisions of Rule 2 of the Club, which empowers the annual election by the committee of a certain number of persons of distinguished eminence in science, literature, the arts or for public service.

## Reviews

LE CORBUSIER UND PIERRE JEANNERET. *Ihr Gesamtes Werk von 1910-1929.* Ed. by O. Stonorov and W. Boesiger. Text by Le Corbusier. Ob. sm. fo. Zürich. 1930. [H. Girsberger & Cie.] £1 10s.

Reviewed by E. R. JARRETT [A.]

The aims and objects of the modern movement in architectural design as understood on the continent have been so often put forward that even the most insular of our countrymen cannot plead ignorance in support of any lack of enthusiasm they may feel for the results. Often this unappreciative outlook is the result of a conservative clinging to known and tried formulae rather than criticism arising out of a fair and thoughtful attempt to find out what is in the mind of the modern designer who produces what at first sight appears to be without precedent. Blind, unreasoning attachment to everything that is new and strange is as much to be deprecated as the ostrich-like attitude of the case-hardened traditionalist for whom "art stopped short at the cultivated court of the Empress Josephine," but whereas the out-and-out modernist may sometimes be accused of following too closely the Athenians of the first century, of whom it is recorded that they "spent their time in nothing else, but either to tell, or to hear some new thing," yet the eager, enquiring mind when backed by reason and logic is likely to go further towards solving a modern problem in a modern way than the other which frowns on every new thing that has not been done before.

Luckily all modernists do not think alike, or Cosmopolis would be upon us, which heaven forbid; and the man who can put down his ideas with sufficient lucidity to make it possible for his publisher to produce a book lays himself open to the assault of the next writer on the same subject, and it is not surprising to find a battle as keen as any battle of the styles raging around the intensely exciting question of how a modern building should be built. Sir Reginald Blomfield in a recent lecture at the Royal Academy on Modernism quoted the gibe thrown at Le Corbusier by Bruno Taut, that "his merit lay principally in his books." Comparing the work, both architectural and literary, of Taut and Le Corbusier, this is faintly amusing, but whether the phrase contains a germ of truth or not it must be conceded that Le Corbusier is no mere, unpractical scribbler. He is admittedly a theorist—and the world would be a poor place without some people of vision—but beyond that he is perfectly capable of putting his theories into practice. These theories will not meet with universal approval; his views on house design may appear stark and mechanical to many and, to take one small point in detail, no Englishman will submit to a w.c. placed in the middle of a living-room; but looking at his work, both projected designs and those actually carried out, one sees them to be efforts by a keen and far-seeing mind. They may be experimental but without experiment there can be no perfection.

This book reflects great credit upon the two editors who show the painstaking care in that acquisition and selection of material characteristic of German book-pro-

duction. It deals with the work of Le Corbusier and his partner, Pierre Jeanneret during nearly a decade—from 1910 to 1929—and is profusely illustrated with over 100 drawings and photographs of a seemingly endless series of projects, small and large, ranging from villas and small housing schemes to the League of Nations building at Geneva and elaborate town-planning developments. The foreword by Le Corbusier himself and the text, which normally takes the form of elaborated captions to the illustrations, is in German, but the illustrations speak for themselves and give, for the first time under one cover, a complete survey of the work of one of the outstanding personalities of our time.

MODERN INTERIORS IN COLOUR. English Ed. of "Farbige Raumkunst," Vol. 5. 40. Stuttgart [1929]. [Julius Hoffmann.] £1 18s.

Reviewed by E. R. JARRETT [A.]

The modern revolt against unnecessary over-elaboration in decoration can lead to strange results. The pendulum has swung about as far towards naked and unashamed structure as it is possible to imagine. This is particularly noticeable on the continent where functional expression is a rather more popular slogan than with us. Simplicity of mass and line, the suppression of mouldings, the almost total absence of any roundness in plan shapes, all tend towards a certain mechanical precision which those who relish a modicum of bodily comfort may find a little trying. It is a good thing to have got rid of the meaningless trappings which vulgarised so much of the work of last century, and the modern architect, having got down to the bare bones of the thing, is beginning to find time for more than mere fulfilment of purpose. He finds that decoration in some form or other is necessary.

In the book under review will be found 100 designs in colour by modern German and Austrian architects illustrating interior treatments. Many kinds of interiors are included but generally they refer to domestic design. Most of them are extremely simple in form and depend for their effect upon a nice discrimination in the use of materials, a pleasant feeling for asymmetrical composition, an ingenious sense of pattern and a good colour faculty. It must be admitted that all the schemes are not of the highest standard and that some of the colour is an acquired taste, but though the expert may cavil here and there, the majority will find many happy suggestions which could be acted upon with profit.

GOLF AND COUNTRY CLUBS. By C. C. Wendehack. Sm. fo. New York. 1929. [Wm. Helburn.] £3 3s.

Reviewed by STANLEY HAMP [F.]

The reviewing of a book is an interesting task. One is called upon to express an opinion on the work of an author who has taken much time and trouble to present to his readers information on a subject upon which he necessarily claims a hearing.

The first difficulty that arises is whether the reviewer's

remarks should be a distinctly personal view, or whether they should be what, to his mind, might be the expectation of the average reader.

In the case of a work on such a subject as *Golf and Country Clubs*, by Clifford Charles Wendehack, the former must surely be the way of approach. In that way one gets something that is definite, and although there may be many readers who may think otherwise, it matters very little, so long as the remarks cause interest in the publication.

In this case we have a most interesting subject dealt with by an author who is master of his subject—one who has created many delightful club houses in a country where such buildings excel in this particular sphere.

When one realises that the club house is a development of a comparatively short period, it reflects much credit on the architects in America for the manner in which they have dealt with this type of building.

It is very difficult to imagine architects in this country ever having the same opportunities, not only on account of the costliness of the buildings, but because of the difference in climatic conditions.

The American public have undoubtedly realised that open air, exercise, fresh air and sunlight are necessary for those who work most of the week in the overcrowded city, and it seems more than probable that this type of building will continue to develop in size and usefulness in the near future.

This book is, therefore, a useful contribution to the profession, and in saying that one may be pardoned for any criticisms.

The book is so well done that it might have been presented in a somewhat more useful form. To the profession such a book becomes invaluable if it contains in a useful form all data relating to the particular subject. If it becomes necessary to read pages of text before one can extract the desired information, it fails as a useful book. This is the case here. The absence of detailed drawings and large scale plans of the departments is to be regretted, especially as these might, with advantage, have taken the place of many of the pages of photographs.

It does not seem to have been fully realised that the value of such a book relies much more, in the information given, upon the technical details, such as will arise as soon as the architect begins to create his buildings, rather than picturesque views.

With the aid of the camera, it seems, in these days, that an author too often produces the picture book. These illustrations should be limited to illustrate mainly composition, texture of materials and the like. The author has rather overdone, in some instances, the number of views of the same building.

The small scale plans are numerous and interesting, but one would like to have had the criticism of the author on the special features and merit of each. These would have added considerably to the interest of the plates. A few remarks on each plan would have been more useful in the study of them. Most of them have special features which are peculiar to the particular problem of site and type of membership.

One feels from the general character of the designs of the numerous buildings that there is a distinct feeling of

country house architecture. While this is quite appropriate, one looks forward in the near future to something perhaps more definitely characteristic of the club house. The book will well repay a careful analysis, and should prove a worthy addition to an architect's library.

#### ACCESSIONS TO THE LIBRARY.

21 MARCH—18 APRIL 1931.

##### INCORPORATING

##### NOTES ON RECENT PURCHASES.

(These Notes are published without prejudice to a further and more detailed criticism.)

Lists of all books, pamphlets, drawings and photographs presented to, or purchased by, the Library will be published periodically. It is suggested that members who wish to be in close touch with the development of the Library should make a point of retaining these lists for reference.

Books presented by Publisher marked R.

Books purchased marked P.

Books of which one copy at least is in the Loan Library marked with an asterisk.\*

#### ARCHITECTURE.

##### HISTORY.

TURAN. *Islamische baukunst in Mittelasien*. By E. Cohn-Wiener. 40. Berlin [1930]. [Wasmuth.] £3 12s. P.

ENGLISH ROMANESQUE ARCHITECTURE BEFORE THE CONQUEST. By A. W. Clapham. La. 80. Oxford, 1930. [Clarendon Press.] £1 10s. P.

\*ADAM (ROBERT AND JAMES). *Works in Architecture of R—and J—A.* (Scopas Series.) 2 vols. [With bibliography.] Sm. fo. Lond. 1931. [Tiranti.] 7s. 6d. P.(2)

DIE BAUKUNST DER NEVESTEN ZEIT. By G. A. Platz. 2nd ed. La 80. Berlin, 1930. [Propyläen-Verlag.] £2 5s. P.

This is a new edition of Adolf Platz's excellent survey of modern architecture, probably the best there is, sane, well illustrated and comprehensive. After a hundred pages of text and line blocks, there are about 400 pages of illustrations, nor are the illustrations merely chosen to illustrate bright young theories, but provide subject for the Englishman who is not able to read the German text, and the best basis for forming his own conclusions. The earlier edition has been put in the Loan Library.

REPRESENTATIVE BRITISH ARCHITECTS OF THE PRESENT DAY. By C. H. Reilly. La. 80. Lond. 1931. [Batsford.] 7s. 6d. P.

SCHINKEL (K F). 2 Cuttings from Special Number of the *Wochenschrift der Deutschen Gesellschaft für Bauwesen*. Berlin, 1931. Presented.

LE CORBUSIER UND PIERRE JEANNERET. *Ihr gesamtes werk von 1910—1929*. Ed. by O. Stonorov and W. Boesinger. Text by Le Corbusier. Ob. sm. fo. Zürich, 1930. [H. Girsberger and Cie.] £1 10s. P.

#### BUILDING TYPES.

ROYAL INSTITUTE OF BRITISH ARCHITECTS: new premises. Conditions for competition for. Pam. sm. 40. [Lond.] 1931. [R.I.B.A.] Inset in JOURNAL of 4 April.

\*THE METROPOLIS OF TO-MORROW. By Hugh Ferriss. 40. New York, 1929. [Ives Washburn.] £1 15s. R.

\*NEUZEITLICHER VERKEHRSBAU. By H. Gescheit and K. Wittmann, editors. Sm. fo. Potsdam, 1931. [Müller and Kiepenhauer.] £2 10s. R. and P.

AMERICAN THEATRES OF TO-DAY. By R. W. Sexton. Vol. 2. 40. New York. [1930.] [Architectural Book Publishing Co.] £2 15s. P.

CIRENCESTER, Parish Church of St. John the Baptist. By J. S. Sinclair, *Archdeacon*. Pam. mo. [Cirencester, 19—.] 3d. *Presented*.

\*BELL'S CATHEDRAL SERIES. [5 vols. not already in Library.] 1900-05. HANDBOOKS TO CONTINENTAL CHURCHES. [2 vols. not already in Library.] 1900-09. 80. Lond. [Geo. Bell.] 1s. 6d. each. P.

METROPOLITANA DI MILANO e dettagli rimarcabili di questo edificio; by [G. d'Adda]. Fo. Milan, 1824. *Presented by the executors of Mr. T. C. Yates [A.]* P.

MALMESBURY ABBEY. Guide. By J. K. D[ean]. Rev. Pam. 80. [Malmesbury, 1929]. 6d. *Presented by the Author.* [SCHOOL INFIRMARIES.] Memorandum on the accommodation for the sick provided at certain public schools for boys in England. Ministry of Health. La. 80. Lond. 1928. [Stationery Office.] 1s. P.

BRITISH MUSEUM (NATURAL HISTORY). General guide. [Containing architectural description.] 80. Lond. 1909. *Presented by H. V. Molesworth Roberts.*

VICTORIA AND ALBERT MUSEUM. General guide to the collections. [Containing architectural description.] La. 80. Lond. 1914. *Presented by H. V. Molesworth Roberts.*

\*ROYAL PALACES OF WINCHESTER, WHITEHALL, KENSINGTON AND ST. JAMES'S. Wren Society: seventh volume. 40. Oxford, 1930. [Oxford U.P. for Wren Society.] P. (2) by subscription.

This work incorporates reproductions of the Winchester Palace building contracts MS. volume in Library.

GOLF AND COUNTRY CLUBS. By C. C. Wendehack. Sm. fo. New York, 1929. [Wm. Helburn.] £3 3s. P.

\*THE HOUSE IMPROVED. By Randal Phillips. Sq. a. 80. Lond. 1931. [Country Life.] 7s. 6d. P. (2).

BOOK OF DOVECOTES. By A. O. Cooke. Sm. 80. Lond., etc., 1920. [T. N. Foulis.] (6s.) P.

ALLIED ARTS AND CRAFTS.

\*GEORGIAN ENGLAND. A survey of social life, trades, industries and art. La. 80. Lond. 1931. [Batsford.] £1 1s. R and P.

MODERN SWEDISH DECORATIVE ART. By N. G. Wollin. 40. Lond. 1931. [Architectural Press.] £2 2s. P.

BUILDING.

MATERIALS AND PRESERVATION.

\*DEATH-WATCH BEETLE. Scientific and Industrial Research, Dept. of: Forest Products Research. Leaflet No. 4. Pam. sm. 40. Lond. 1931.

\*PREVENTION OF PATTERN STAINING OF PLASTERS. Dept. of Scientific and Industrial Research: Building Research, Bulletin No. 10. Pam. 80. Lond. 1931. [Stationery Office.] 4d. R.

This bulletin describes the research made at Watford to discover a means of preventing the "pattern staining" of plaster over laths, an unpleasant disfigurement that reproduces in a dust deposit on the surface of a vault or ceiling the pattern of the lathing behind the plaster. Pattern stains occur usually where the air above the plaster is for long periods at a different temperature to that in the room below; the plaster below the laths is at a higher temperature than the rest of the ceiling, so that temperature gradients are set up tending to direct rising dust to the colder portions to which it adheres, leaving a ghost of the laths "photographed" on to the ceiling surface.

The bulletin describes various methods of equalising the temperature on the ceiling, this being the only effective

means of preventing stain, since all ordinary papers, glass paints or lead foil have proved useless. The report will do much to destroy a great source of irritation to architects and clients alike.

CAST IRON TO-DAY. By A. B. Everest. (Institution of Welding Engineers.) Pam. 80. Lond. 1931. 2s. R.

PRACTICE.

LANDLORD AND TENANT ACT, 1927. (Parliament: Acts.) 80. Lond. 1927. [Stationery Office.] 6d. P.

VALUATION OF REAL PROPERTY. By C. A. and N. A. Webb. 5th ed. 80. Lond. 1931. [Crosby Lockwood.] £1 1s. P.

SANITARY SCIENCE.

\*ELECTRIC WIRING OF BUILDINGS. By F. C. Raphael. Sm. 80. Lond. 1930. [Pitman.] 10s. 6d. P. (2).

DRAWING.

\*ARCHITECTURAL DRAWING, PERSPECTIVE AND RENDERING. By Cyril A. Farey and A. Trystan Edwards. Sm. 40. Lond. 1931. [Batsford.] 16s. R and P. (2).

DECORATION.

MODERN INTERIORS IN COLOUR. Eng. ed. of *Farbige Raumkunst*, vol. V. 40. Stuttgart [1930]. [Julius Hoffmann.] £1 18s. P.

TOWN PLANNING AND HOUSING.

HISTOIRE DE L'URBANISME. Antiquité—moyen age. By P. Lavedan. Sm. 40. Paris, 1926. [Laurens.] £1 2s. 6d. P.

\*TOWN PLANNING AND AVIATION. First (interim) report of the R.I.B.A. Aerodromes Committee. Pam. sm. 40. Lond. 1931. [R.I.B.A.] 1s.

TWENTY-ONE YEARS OF TOWN PLANNING IN ENGLAND AND WALES. By G. L. Pepler. (Town Planning Institute.) Pam. sm. 40. Lond. 1930. 1s. R.

CHARING CROSS, PROPOSED ROAD BRIDGE AT. Report . . . of the Advisory Committee. . . . London County Council. Sm. fo. Lond. 1931. [P. S. King and Son.] 2s. 6d. P.

LAW OF TOWN PLANNING. By A. Safford and G. Olver. 2nd ed. 80. Lond. 1929. [Hadden, Best and Co.] £1 1s. 6d. P.

DECENTRALIZATION, interim report on. Greater London Regional Planning Committee. (By Raymond Unwin.) Pam. sm. fo. Lond. 1931. [Knapp, Drewitt and Sons.] 6d. R.

OPEN SPACES, interim report on. Greater London Regional Planning Committee. Pam. sm. fo. Lond. 1931. [Knapp, Drewitt and Sons.] 6d. R.

A review by Mr. Barclay Niven of the report on Decentralisation was published in the last Journal. In the report on Open Spaces Dr. Unwin, who has prepared the reports for the Regional Planning Committee, draws attention to a survey made by the L.C.C. a few years ago of possible playing fields between 8 and 12 miles from Charing Cross, and notes that in the intervening years over 5,000 acres free when the L.C.C. survey was made have now been used for building. 20,000 acres are still available, and Dr. Unwin urges strong action to secure this badly needed space for recreation grounds. As a result of the report the L.C.C. are calling a conference of County and County Borough Councils in the region with a view to doing, by voluntary associated action, work that would otherwise devolve on a Joint Regional Committee.

\*HOUSING, 1928-30. London County Council. La. 80. Lond. 1931. [P. S. King and Son.] 2s. 6d. R and P. (2).

HOUSING ACT, 1930 [slum clearance, etc.]. (Parliament: Acts.) 80. Lond. 1930. [Stationery Office.] 1s. P.

*Manuscripts.*

ARCHITECTURAL WORK OF THE ORDER OF ST. JOHN OF JERUSALEM IN MALTA. By Anne J. Cooke. (Thesis for Final Examination, July, 1929.) Typescript fo. [1929]. *Presented by the Author.*

SMALLER TIMBER-FRAMED HOUSES OF KENT. By H. J. Dicketts. (Thesis for Final Examination, Dec. 1929.) Typescript sm. fo. [1929]. *Presented by the Author.*

MANOR HOUSES OF SUSSEX. By R. F. Tatchell. (Essay Medal, 1931.) Typescript sm. fo. 1931. *Presented by the Author.* GARDEN DESIGN AND ITS RELATION TO ARCHITECTURE. By J. S. Hartley. (Thesis for Final Examination, July, 1930.) Typescript sm. fo. 1930. *Presented by the Author.*

*Drawings.*

NEW (EDMUND H.). Oxford: from Hinksey Hill. Christ

Church and Magdalen College from the Long Bridges. *Pencil D.*, mounted (2). 1927.

*Presented by Mr. S. D. Kitson [Hon. Secy.].*

Oxford: St. John Baptist College. 1923. Pembroke College. 1924. Worcester College. 1931. 3 sheets. *Photo-engraved by Emery Walker. £1 5s. each. P.*

*Maps.*

LONDON: Area lying east of St. Katharine's Hospital (now St. Katharine's Dock). London Topographical Society, Pubn. for 1929. *From tracing by M. B. Honeybourne. (With text leaflet.) Repr. (c. 1590) [1931]. P. by subscription.*

We wish to call attention to the fact that the English Publishers of Hugh Ferriss' *Metropolis of Tomorrow* are Messrs. B. T. Batsford Ltd.

## Obituary

## FREDERICK WHEELER [F.]

The death of Frederick Wheeler, F.R.I.B.A., at the age of seventy-seven, removes from the ranks of the Institute one of its oldest working members. Mr. Wheeler entered the Institute in 1882 and was elected a Fellow in 1884. For more than half a century he carried on a busy practice, and though it will not be claimed for him that he was among the greatest architects of his generation, nevertheless he was responsible for a great deal of work of high quality. He was a man of sound instincts and ripe judgment, and he stood for the best in the general practice of the profession.

In his early days he carried out much work in Streatham, then a rising suburb, where many residences and shops still stand as evidence of his youthful skill. Subsequently taking up his residence in Horsham he imbibed the spirit of the countryside, and became one of its notable exponents in terms of architecture. His use of the local materials with sympathy and understanding and his wise choice of bricks and old oak, combined with his sense of the fitness of things, resulted in his buildings fitting into and belonging to their surroundings. He took great pains to preserve the local tradition in whatever part of the country he might be building.

As well as his country houses Mr. Wheeler did a considerable amount of work in London, where he had an office in Staple Inn. He was responsible for several town houses, numerous branches for the London and County, and later the Westminster Bank, one or two churches, and a number of hospitals. In 1902 he won the competition for the Mount Vernon Hospital at Northwood.

During his career he was a member of several partnerships. He gave his personal interest to whatever work came into the office, and was always ready with wise and sympathetic counsel. As a consultant he was in request, and for many years acted as Surveyor to Malvern College. In his youth Mr. Wheeler served in the old Volunteer Force, being a member of the Artists Corps, and was present at certain notable reviews in Hyde Park. Though past military age during the Great War he rendered such willing service as was possible for a man of his years.

Mr. Wheeler was extremely fond of music, and at one time it was a question whether he should follow this art as a profession, and though his choice eventually fell upon architecture, music remained a life interest.

He had many friends, and once the office door was closed he took pleasure in welcoming his assistants to his house on Sunday afternoons, where the master became the friend.

## LOUIS VIOLLIER.

## HON. CORR. MEMBER FOR SWITZERLAND.

The death occurred, on 7 March, at the age of 78, of Louis Viollier, of Geneva, appointed Honorary Corresponding Member of the Institute in 1895.

He studied architecture at the Polytechnicum de Stuttgart, followed by a final course at l'école Barthélémy Menn and at l'école des Beaux Arts, Paris. In 1879 he was appointed architect to the town of Geneva, a post which he held until 1889, when he entered into practice with M. Georges Autran. M. Viollier was closely connected with the restoration of the Cathedral of St. Peter's, a work which aroused much criticism. He was always interested in the army, and had an aptitude for military affairs. During the Great War he was a Lieutenant-Colonel and in charge of the Postal censorship in Geneva. At the end of the war he retired on account of ill-health.

During the inactivity of his retired life he devoted himself to the study of political, moral, and religious questions. He dreamed of a great association of men banded together in reaction against the egotism which threatens to drown all the best in humanity. He produced several booklets on this subject which, however, were little known, but which deserved reading, containing, as they did, the results of much study and thought. They were the reflections of a man of noble spirit and keen observation. Patriotic Swiss as he was, he expected of the League of Nations either a new and prosperous era, if only those concerned would live up to the ideals of the Institution, or failing that a sinking down deep into the old ways.

Louis Viollier was a man of high ideals, and completed works so often seemed to him far worse than they were. During the latter years of his life he suffered from great pessimism on this account.

## RONALD EDWARD EILOART [A.]

All who knew Mr. R. E. Eiloart at Harrow, at the Architectural Association, in the Army, or in practice, will be moved at the announcement of his death, which took place quite suddenly and unexpectedly on 23 March at his home, "Little

Zeal," South Brent, Devon. He was born in 1885 and was the third son of Mr. Frederick E. Eiloart, of Elsworthy Road, Hampstead; and principal of the firm of Messrs. Eiloart, Son, and Inman, surveyors, 40, Chancery Lane, W.C.

R. E. Eiloart was educated at Harrow, and for three successive years was a member of the Harrow Cricket XI to meet Eton at Lord's. Not only was he a great cricketer, but he excelled at "Fives," and with his partner (E. Craik) played against most of the public schools as representatives of Harrow—and were never defeated! In honour of this achievement a Fives Court was built at Harrow in memory of these players. R. E. Eiloart, as were most of his brothers, was a stalwart supporter of the famous Hampstead C.C.; a keen hockey player, and fond of all outdoor sports. On leaving Harrow, he was articled to the late Mr. Henry T. Hare, F.R.I.B.A., Past-President of the R.I.B.A. 1917-19.

When war broke out in August, 1914, he was assisting Messrs. Scott and Fraser, of Old Square, Lincoln's Inn, and straightway he, with his brother (the late 2nd Lieut. Cyril Howard Eiloart), joined the R.A.M.C. After a strenuous period with this branch of our Army, both brothers obtained commissions in the Irish Guards (attached Guards' Machine Gun Regiment), 2nd Lieut. Cyril Howard Eiloart fell in action on 25 September 1918, but Ronald Eiloart came through the whole campaign unscathed, though probably the trials and hardships left some mark.

At the end of the war he was elected an Associate of the Institute. He married and went to reside in Devon, and whilst following the profession of architecture he took a keen interest in all the sports and pastimes in his district, and his loss is keenly felt by all who knew him in the quiet district of South Brent.

Ronald E. Eiloart was undoubtedly a fine type of the thorough-going, clean-living Britisher, and his life might well be taken as a pattern for all who wish to excel in play or work and be honoured by his associates in each branch.

Sympathy is extended to his family and widow, and there are few who knew him who could not add much of interest to this somewhat sketchy biography recording our loss.

#### V. STEADMAN [A.]

Mr. V. Steadman, A.R.I.B.A., passed away on 15 February 1931. He had been an Associate of the R.I.B.A. since 1899. After serving his articles in Bristol, he assisted Messrs. W. S. Paul and R. C. James, leaving them to take up an appointment in Singapore under the Public Works Department.

Returning to Bristol in 1919 he joined with Richard C.

#### PROFESSIONAL CHARGES

The Practice Standing Committee again desire to call the attention of members to the necessity for bringing the Scale of Charges to the notice of their clients at the outset of the job.

The Committee receive a large number of letters from members who have difficulties about their fees, and it is safe to say that in nearly nine cases out of ten the difficulties arise entirely from the neglect of the architects concerned to act upon the constantly reiterated advice given to them by the Committee upon this matter. An infinite amount of trouble would be saved to the profession generally, and, incidentally, to the Practice Committee and its officers in particular, if members would be more business-like and act upon the advice given to them.

James [F.] and was in practice with him until the date of his death, and during the past 12 years had, in conjunction with his partner, carried out many works such as schools, hotels, factories and domestic work in the district.

#### H. SESOM-HILEY [L.]

The death occurred on 26 March of Mr. H. Sesom-Hiley, L.R.I.B.A., at the age of seventy.

Mr. Hiley was the architect for many public and private buildings, including churches, schools, hospitals, offices, etc., and quite lately he had been doing some Gothic work in connection with Glasgow University Chapel for Sir John Burnet and Partners. For some years he was assistant at Cardiff Castle to the Marquis of Bute's resident architect, the late William Frame, A.R.I.B.A., who had succeeded William Burges, A.R.A., in the post, and, later, Mr. Sesom-Hiley himself held the position for nearly five years. His work there included extensive alterations and additions and the exploration and restoration of Roman work. For three years he was on the staff of the Architect and Housing Administrator, in connection with the London County Council's housing scheme at Bellingham. He was also principal architectural assistant to the engineer, Wandsworth Borough Council, for three years. For many years he was a member of the Architectural Association.

#### PERCY HARRISON.

The death occurred on 15 March of Mr. Percy Harrison, Borough Surveyor of Middleton, at the age of 39.

Mr. Harrison was born at Bradford and served his articles under his father with the Wombwell Urban District Council from 1907 to 1911. From 1911 to 1913 he was with the Ruislip-Northwood Urban District Council followed by a year with the Uxbridge District Council. In 1914 he went to Middleton as architectural assistant, and he showed great talent in the drawing office. In 1915 Mr. Harrison joined the Army, seeing considerable service abroad until his discharge in 1919. He was mentioned in dispatches and awarded the Meritorious Service Medal. On his return to Middleton in 1919 Mr. Harrison was appointed Borough Surveyor and in 1925 he obtained the appointment of Borough Architect.

Mr. Harrison was a Fellow of the Royal Geographical Society, and was interested in many local institutions, and in an official capacity was associated with the Langley Lodge of Freemasons.

Mr. Harrison was expert in road reconstruction and the covering over of the river in Fountain Street, Middleton, was an engineering feat for which he was responsible.

#### ISOMETRIC DRAWING OF ST. PAUL'S CATHEDRAL BY MR. R. B. BROOK-GREAVES.

The Board of Architectural Education have ascertained that there are still some copies available of the isometric drawing of St. Paul's Cathedral prepared by Mr. R. B. Brook-Greaves. The copies, which take the form of full-size reproductions, may be obtained from the Architectural Press, Ltd., 9, Queen Anne's Gate, London, S.W.1, price £1 10s. 6d. each.

The Board of Architectural Education consider that this drawing is of great educational value and that all Schools of Architecture and Schools of Art, Technical Colleges, and Polytechnics teaching architecture should possess at least one copy.

## ARCHITECTURAL COPYRIGHT.

With the authority of the Council, the Practice Standing Committee instructed the Institute Solicitors to submit the following case to Counsel for his opinion :—

A Building Owner has a large site which he is going to develop in two portions. His Architect designs the elevation for the whole block, and superintends the erection of the first portion and is properly paid, and his work ceases. A year or two after the Building Owner desires to proceed with the second portion of the scheme. He does not employ the same Architect, but instructs another one to proceed with the work, following the elevation of the first portion of the premises already built.

Under these circumstances the Committee desire to know from Counsel :—

(1) To whom does the copyright in the design of the whole block belong ?

(2) Inasmuch as the first Architect's fees have been paid, and he would therefore be obliged to hand over the drawings, can the Building Owner use those drawings for completing his building without infringing the copyright ?

(3) Would the second Architect be entitled to use any drawings of the first Architect, handed to him by the Building Owner, without incurring penalties ?

(4) If there are no drawings available for the completion of the second block, would this second Architect, on the instructions of the Building Owner, be entitled to copy the first block and complete the elevation ?

Counsel's opinion has now been received as follows and is published for the information of members on the recommendation of the Practice Standing Committee :—

## OPINION.

In my opinion an Architect is employed *prima facie* on the implied terms that having prepared drawings which have been accepted he is not only under an obligation to the Building Owner to supervise the construction of the work contemplated, if called upon to do so, but is entitled to withhold his drawings from the Building Owner if being able and willing to supervise the construction of the work the Building Owner attempts to dispense with his services either by employing another Architect, or by completing the work without an Architect.

In the case put, of a proposal to erect a block of buildings in two portions of uniform design and an Architect being employed to prepare drawings for and supervise the erection of the first portion, the position is a little different, but the same principles are applicable. The Building Owner is entitled to delivery of the drawings to him as his property when the first portion is completed. In my opinion, however, neither the copyright in the drawings nor in the buildings as a work of architecture passes to the Building Owner and, therefore, the Building Owner cannot use the Architect's plans for the purpose of constructing the second portion of the block without the consent of the Architect. Even although the Architect knew from the beginning that the Building Owner intended to erect the block in two portions of uniform design and his contract was only in respect of the first

portion, nevertheless, there is, in my opinion, no implication of consent on the part of the Architect to the use of his drawings for the purpose of constructing the second portion under the supervision of another Architect, or without the employment of any Architect. I have already advised the R.I.B.A. that, unless there is an express agreement to the effect that the Building Owner shall be entitled to the copyright in an Architect's drawings or there are special circumstances in the case which compel the implication of an agreement to that effect, the copyright in the drawings remains with the Architect, and if that be so the drawings cannot be used for the purpose of further construction without the Architect's consent or under some express or implied term of his engagement, that his drawings may be so used.

I am assuming that the buildings in question are of such an original artistic character or design as to entitle them to protection as an architectural work of art, and on that assumption I am of opinion—

(1) That the copyright in the design of the whole block belongs to the Architect.

(2) That although the Building Owner has paid the Architect his agreed fee in respect of the first portion of the block, and is in possession of the drawings he cannot use them for completing the block without infringing copyright.

(3) The second Architect, by authorising and being privy to the erection of the building, would also infringe copyright and be liable to damages or penalties accordingly.

(4) If the drawings were not available it would equally be an infringement of copyright for the Building Owner or second Architect to complete the block by copying the first portion from the building already erected.

(Signed) E. M. MACGILLIVRAY.  
11th February 1931. Temple, E.C.4.

## WORKERS IN THE BUILDING TRADES.

Arising out of the lectures on Architecture to workers in the building trades arranged by the Board of Architectural Education, the Council, on the recommendation of the Board, wish to draw the attention of all practising architects to the following points which were brought out during the discussions which took place :—

1. That more interest would be taken by the craftsmen in the buildings upon which they were engaged if models of the proposed buildings were placed upon the works for their inspection while the buildings were in progress, and that complete plans and drawings might be available in order that the men could see how the work they were doing fitted into the whole structure.

2. That craftsmen should be given more liberty to use their discretion in the execution of their particular crafts.

3. That the architect and craftsman should get into closer personal touch with each other.

4. That architects might take building apprentices over their works while in progress and at completion.

## Allied Societies

*(The attention of Members of the Allied Societies is particularly called to these pages)*

### WEST YORKSHIRE SOCIETY OF ARCHITECTS.

The fifth of the series of lectures by members of the above society, arranged in conjunction with the local education authority, was given in the Technical Institute, Huddersfield, by Mr. Joseph Addison, head of the Leeds School of Architecture, on 6 March, the subject being "Modern Architecture."

The lecturer affirmed that there were buildings being now erected in Leeds and Huddersfield which would be out of date before the scaffolding had been removed. England had shown a sad lack of enterprise in not taking up the new movement in architecture. Progress was now so rapid that the architect had to be alert to seize upon new materials and more mobile forms of construction. The limitations, went on the speaker, which governed the design of the heavy stone and brick buildings of the pre-modern style, would not be encountered by the designers using the new materials. The American skyscraper, rising a thousand feet above the level of the street, was an accomplished fact; and perhaps within the next decade, the horizontal skyscraper, supported by columns of steel, would also be a reality. It would have the advantage of permitting unrestricted traffic beneath its widespread legs, and afford an abundance of light and air to both the buildings and the trafficways beneath them. He thought that the buildings of the near future would consist almost wholly of metals, glass, and new chemical compounds.

A general meeting of the above society was held at Bradford on 19 March, when the officers for the session 1931-32 were elected as follows: President, Mr. Norman Culley, Huddersfield; Vice-Presidents, Mr. J. F. Walsh, Halifax, and M. B. R. Gribbon, Leeds; Hon. Secretary, Mr. Norval R. Paxton, Leeds.

A lecture was given by Mr. F. R. Yerbury, of the Architectural Association, entitled "Swedish Architecture of To-day," during which the lecturer explained that Sweden was a remote country where, as in England, its people when intending to visit Germany, spoke of "going on the Continent." For its architecture, it had up to the beginning of the present century drawn upon Renaissance models, and, later, on the romantic styles as typified by the work of William Morris. At the beginning of the present century, however, it had been bitten by the modernist movement, and since that time most of its principal buildings had followed that style. Swedish architects were paid due honour by their fellow countrymen, and were also called in by manufacturers and others to design furniture, silverware, glass and other articles of everyday use. Numerous illustrations were shown upon the screen and described in an interesting manner.

Mr. J. C. Procter moved, and Mr. J. R. Edmondson seconded, the vote of thanks, which was supported by Major F. W. Moore and Mr. B. R. Gribbon, the latter of whom explained that in the Civic Building at Stockholm the departments were not planned horizontally, so that each occupied one floor, but vertically, so that in place of wandering on lengthy corridors to find different sections of a department, one simply took the lift for that purpose.

The sixth and final lecture of the series given by members of the above society in conjunction with the local education authority, was delivered at the Huddersfield Technical Institute, on 20 March, by the president, Mr. Norman Culley, his subject being "The Past: Its Lessons; The Present and the Future."

The lecturer, by means of over one hundred lantern slides, traced the structural evolution of architecture through successive periods: The limited requirements of the Greeks, and the consequent simplicity of their buildings; the more complex needs of the Romans, leading to a love of magnificence; the unbalanced plans of Mediaeval structures, and their development of walled cities, with the cathedral or church as an aesthetic and spiritual centre; and the world movement of the Renaissance; and, later, civic planning in the grand manner as developed in France. The various movements responsible for the so-called new architecture were explained, and that so rapid had been the progress, many of these buildings were already out of date. A vision of the city street of the future was conjured up by Mr. Culley.

A vote of thanks was moved by Mr. A. L. Dyson, and seconded by Mr. J. H. Milner. The chairman, Mr. Barratt, secretary of the education authority, thanked those concerned in organising the course of lectures, which, in view of the large attendances, he was sure had been highly instructive to both students and public.

### SOUTH WALES INSTITUTE OF ARCHITECTS.

The annual dinner of this Association took place on 19 March at Cardiff.

Mr. T. Alwyn Lloyd [F.J.], President of the South Wales Institute, was in the chair, and among the large company present were the Lord Mayor, Dr. Raymond Unwin [V.P.R.I.B.A.], Mr. Ian MacAlister, Mr. G. C. Lawrence [F.J.], Mr. T. Arthur Smith [F.J.], Mr. W. J. Stenner [F.J.].

The toast of the "Royal Institute" was proposed by Mr. W. J. Williams, M.A., Director of Education at Cardiff, who remarked that architecture was so obvious that no one seemed conscious of it or to appreciate it. The splendid creations of the architects through the ages had enabled man to realise fully what culture could do for men. With the renaissance of architecture that was being experienced to-day they were likely to see great changes in town planning and the building of houses, and the Institute had made material contributions towards this renaissance.

Dr. Raymond Unwin responded to the toast, saying that the Institute was primarily for education and only secondarily a professional guild of architects, but there were two sides of education, and they did not always give quite enough attention to the education of the public. He hoped to see the time come when it would be considered out of the question for a university to turn out graduates who did not know the difference between a good and a bad building. Finally, Dr. Unwin said that he hoped to see the civic centre that Mr. Ivor Jones and Mr. Percy Thomas had designed for Swansea realised in brick and stone in their day. Mr. G. C. Lawrence, R.W.A. [F.J.], also replied to the toast.

Mr. Alwyn Lloyd, in proposing "Our Guests," recalled how the South Wales Institute was founded over 40 years ago, and how it endeavoured to teach the public as well as the young architect at the Institute's own school under the able guidance of Mr. Purchon. He also mentioned that it was taking part in the movement for the preservation of the countryside, and in the control of design of public buildings.

## DEVON AND CORNWALL ARCHITECTURAL SOCIETY.

The annual meeting of the Devon and Cornwall Architectural Society was held on Saturday, 28 March 1931, at the Imperial Hotel, Exeter.

The chair was taken by the President, Mr. John Bennett, L.R.I.B.A., of Exeter, who, in opening the meeting, expressed his appreciation of the record attendance, which showed an increasing interest which he hoped would be maintained. He especially welcomed two members from Cornwall.

The minutes of the preceding annual meeting were read, confirmed and signed by the President, and the annual report and balance sheet of the Society were presented and unanimously adopted. The annual reports and balance sheets of the branches were also presented and adopted.

The prizes offered for the annual competition of Measured Drawings were presented to Mr. P. J. T. Carter and to Miss K. I. Maynard by the President who congratulated them on the high standard of their work. He impressed upon Students the value of measuring and recording buildings of merit and assured them that time spent in this manner would be of more assistance in the future than they probably imagined.

Mr. B. Priestly Shires presented to Miss Maynard the prize he had offered for pen and ink sketches and congratulated her upon her work.

Mr. Bennett, the retiring President, in his address referred first to the progress of the Registration Bill and pleaded that the united support of all members of the Society be given to the R.I.B.A. We hear, he said, far too much about architects and too little about architecture and he appealed to all those who might be opposing the development scheme, Registration or the R.I.B.A., to remember that the R.I.B.A. was the parent body, which for many years had been working in the interests of architecture and architects, and if the Institute had not had the success it deserved the blame must rest with the architects as a whole. He next referred to the subject of official architecture emphasising the fact that only a united profession could deal with it in a statesmanlike manner. There was first the political aspect and it was not essentially the business of architects to criticise the political state of society. The evolution that had taken place in this democratic age had resulted in much work passing into the hands of national and local governments and this condition of things had to be recognised. The profession had not, however, recognised or had ignored the changed conditions with the result that many architects were serving local authorities as minor departments of their profession without direct responsibility or touch with the local authority concerned, conditions which make it impossible for them to produce their best work. This is the result of a rapid growth of local government and of indifference on the part of the public who have not been educated to realise the importance of architecture to the community.

Mr. Bennett then referred to the question of publicity and emphasised the need for the profession as a whole to make itself known to the general public and for each architect to take his proper share in the duties and privileges of citizenship.

Having referred to the new form of contract and congratulated the Practice Standing Committee on their work, Mr. Bennett dealt with local matters, appealing to members to take a personal interest in the work of the Society. He also referred to the education work in the Society's area and to the prizewinners of the year. Mr. Bennett also said that a letter had been sent to the Bishop of Exeter protesting against the destruction of six churches in the city. Finally, he thanked the members of the Society for their help and kindness, particularly naming the Honorary Secretary, Mr. J. Challice.

A hearty vote of thanks was accorded Mr. Bennett, members expressing their appreciation of the untiring manner in which he had worked for the Society. Mr. Bennett had spared

neither time nor effort and had terminated his year of office with an address which would give much food for thought and discussion.

The following officers of Council were elected for the ensuing year:—President, H. Victor Prigg, A.M.I.C.E.; Vice-Presidents, A. S. Parker, F.R.I.B.A., and A. H. Ough, F.R.I.B.A.; Past President, John Bennett, L.R.I.B.A.; Hon. Treasurer, S. Dobell; Hon. Auditor, L. F. Tonar, L.R.I.B.A.; Hon. Secretary, J. Challice, A.R.I.B.A.

Mr. Prigg, in taking over the chair, thanked the members for electing him to be their President and assured them that it would be his pleasure to serve the Society to the utmost of his power.

## SOUTH WALES INSTITUTE OF ARCHITECTS.

## ANNUAL MEETING.

The annual meeting of the South Wales Institute of Architects was held on 26 March. The following officers were elected to serve for the year:—Mr. J. Herbert Jones [F.], President; Mr. T. Alwyn Lloyd [F.] and Mr. E. H. Fawcett [F.], Vice-Presidents; Mr. H. Teather [F.], Honorary Treasurer; Mr. J. Williamson [A.], Honorary Auditor; Mr. W. S. Purchon [A.], Honorary Librarian; and Mr. Ivor P. Jones [A.], Honorary Secretary.

In his address the retiring President, Mr. T. Alwyn Lloyd [F.], referred first of all to the Registration Bill; opposition, he said, was bound to arise, apparently among some members of Parliament there was a quite unnecessary suspicion of the Institute and of the policy it had attempted to pursue in the interests of architects and for the protection of the public. The opposition of the Institute of Builders and the manner in which their Secretary had carried on his controversies was most regrettable and particularly to them in South Wales, where the relations between the Institute of Builders and the South Wales Institute had always been cordial. Mr. Alwyn Lloyd next referred to the proposed new headquarters for the R.I.B.A.; to the re-opening of the Licentiate class in which the allied societies were loyally collaborating, many applications having already gone forward from South Wales, and to the new form of contract, remarking on the very reasonable spirit in which the builders had met the views put forward by the Practice Standing Committee. Mr. Alwyn Lloyd then described the Town and Country Planning Bill, by means of which it will now be possible to facilitate development to meet changes in industry and business and to cope with the increased motor traffic, while the vexed question of compensation would be more clearly defined. The measure, he hoped, would be dealt with on non-party lines, it is one in which architects were vitally concerned. Next Mr. Alwyn Lloyd dealt with the activities of the South Wales Institute, which had just passed its fortieth anniversary, and despite industrial depression still continued to flourish and maintain prestige. Much good work had been done and many public lectures, members' discussions and other meetings had been held. He paid a tribute to the efficient manner in which the officers of the branches had worked. The Institute had approached the authorities on several questions of public interest and their influence had, he hoped, been very good. Particularly he mentioned the representations made as to the Cardiff Corporation Bill, the new station at Cardiff, certain buildings in Cathay's Park, and the Neath Municipal Buildings. In their area, he said, the corporations of Swansea, Cardiff and Newport possessed powers of control of elevations, and mention was made of the efforts to obtain in the case of the Cardiff Act better procedure than had ultimately been adopted. The conditions for the award of the South Wales Architectural Medal were, he said, recently issued, and he hoped that the offer of the medal would act as a stimulus to our members and an indication to the public of the type of

work being done by architects. The Association had also offered one of the chief prizes at the last National Eisteddfod. The offer was being repeated again for the 1932 Eisteddfod.

Referring to the work of the Welsh School of Architecture, Mr. Alwyn Lloyd said that it had grown in numbers and in influence, and at the annual prize giving practical evidence was shown of the high quality of work done during the year. He hoped that the recognition of the school by the University would soon take practical shape, and also that the Institute might manage to found a Travelling Studentship to be competed for among the younger members. I know of nothing, he said, that would be of greater benefit to students or to the assistant recently started on his office career than such an opportunity to study abroad. Reference was then made to the successful annual dinner on 19 March, which was attended by Dr. Raymond Unwin, V.P.R.I.B.A., in the absence of the President. Finally, Mr. Alwyn Lloyd thanked the members for the support given to him during his two years of office and expressed warm appreciation of the work of the officers of the South Wales Institute.

#### WEST YORKSHIRE SOCIETY OF ARCHITECTS.

Mr. J. Needham took the chair on 20 March at a debate held at the Leeds headquarters of the Society on the motion: "That architecture is of vital importance to the layman."

Mr. J. A. Naylor, opening the debate, said that the world could not express itself without architecture which revealed in lithic history the social conditions, progress, religions, and events which were landmarks in the march of mankind. Architecture had supplied shrines for religion, homes for the living, and monuments for the dead. Ruskin told them that it was an art for all to learn because all were concerned with it. One of man's primary instincts was to build a shelter and a stronghold, which afterwards developed into a desire to satisfy his emotions. The architect controlled the habits of the layman, and decided where he shall breakfast and where he shall hang his hat. He controls the layman from the moment he gets out of bed until the hour that he retires to rest. How, then, could architecture be of anything but of vital importance to him?

Opposing the motion, Mr. G. B. Stickney thought that any importance which architecture assumed in the mind of the layman was to a large degree subconscious. He thought it would be more true to say that the layman was of vital consequence to architecture. It was the duty of the educationalist to introduce the layman to architecture, but the speaker felt sure that the layman would be just as happy without the acquaintance. It was doubtful whether the mind was much influenced by environment. Happiness came from within, and not from without.

Mr. E. Seel remarked that Indians in wigwams lived more happily and carefree than people in modern houses, the architecture of which was anything but vital to the inmates. He thought it was a very good thing that the layman was not vitally interested in architecture, so that it could be carried on free from lay interference.

Mr. S. Simpson said that the occupants of office blocks were exhilarated if these were of good design and generally admired; they felt proud to be occupied in a building of good design. In that sense architecture was certainly vital to the layman.

Mr. D. D. Harrison and Mr. R. J. Edmondson also spoke.

Mr. Norman Culley, president, thought that architecture had the greatest influence on the minds of the public, however humble their station in life; but that modernist buildings would not tend to enhance their interest.

Mr. H. Waddington remarked that the inmates of warehouses and factories, if these were well planned, knew how to escape with the least danger to themselves, and in that sense architecture became of vital importance to them.

Messrs. F. Chippendale, F. R. Pullan and R. C. Davis also took part in the debate, and on the vote being put, the majority of those present voted an affirmative view of the question.

#### MANCHESTER SOCIETY OF ARCHITECTS.

On Wednesday 11 March the final sessional meeting was held at the Manchester Society of Architects, with the President in the chair, when a lecture was delivered by Professor Jacob on "Formalism in Mediaeval Art."

Professor Jacob traced the manner in which the early formalism of the sculpture in Anglo-Saxon churches, the knowledge of anatomy developed through Romanesque and early Gothic work throughout Europe without any loss of formal expression.

Interesting slides of Hildesheim, Chartres, Lincoln and elsewhere were shown.

On Wednesday 18 March, the final Lecture of the series arranged by the Manchester Royal Institution, the Builders' Federation, and the Manchester Society of Architects, was delivered at the Manchester University, by Mr. C. R. Peers, C.B.E., F.R.I.B.A., upon "The Treatment of Old Buildings."

Mr. Peers described the methods used by his department in the treatment of walls in making them stable with the minimum disturbance of their surface.

A very fine series of slides of Rievaulx Abbey, Furness Abbey, Goodrich Castle, Buildwas Abbey, Harlech Castle, was shown, together with interesting detail photographs of masonry, before, during, and after treatment.

Mr. Peers replied to a number of questions at the conclusion of his lecture.

#### ESSEX, CAMBRIDGE AND HERTS SOCIETY OF ARCHITECTS.

The annual meeting of the West Essex Chapter was held at the Royal Institute of British Architects on 27 March and important business was transacted in arrangements for forthcoming meetings, lectures and education programme for 1931-2.

A pleasing event was the presentation of a bound collection of Poley's architectural engravings of St. Paul's Cathedral to the Southend School of Arts and Crafts, by Mr. S. Phillips Dales, the Chairman of the Chapter. Councillor Tattersall, on behalf of the Borough of Southend, and H. S. Blakey, Esq., A.R.C.A., the Principal of the School, were present, and in accepting the gift on behalf of the School of Architecture, thanked the donor for the gift, and the Chapter for the practical interest they had taken in the School.

N. D. Martin-Kaye, Esq., F.R.I.B.A., Head of the School of Architecture, sent an apology for his absence through illness.

The following gentlemen were elected as officers and executive for the ensuing year: Chairman and Treasurer—Mr. T. H. B. Scott, L.R.I.B.A.; Vice-Chairman—Professor R. L. Garbe, A.R.A.; Past Chairman, Mr. S. Phillips Dales, F.R.I.B.A.; Hon. Secretary—Mr. Arthur C. Russell, L.R.I.B.A.; Executive—Messrs. J. J. Crowe, O.B.E., A.R.I.B.A., R. C. Foster, F.R.I.B.A., Edward Fincham, A.R.I.B.A., J. E. Hammond and A. Thomerson, L.R.I.B.A.

#### THE ARCHITECTS' AND SURVEYORS' APPROVED SOCIETY.

##### GENERAL MEETING.

The annual general meeting of the Architects' and Surveyors' Approved Society was held on Thursday, 19 March 1931, at the Royal Institute of British Architects, by kind permission of the Council.

The report of the Committee of Management for the year 1930 having been unanimously adopted, the election of members of that Committee for 1931/32 then took place. The following gentlemen were elected:—

A. Goddard, Esq., C.B.E., R. G. Strachan, Esq., F.S.I., A. A. Beckham, Esq., F.S.I., representing the Chartered

Surveyors' Institution; H. D. Searles-Wood, Esq., F.R.I.B.A., Herbert Shepherd, Esq., F.R.I.B.A., Ian MacAlister, Esq., representing the Royal Institute of British Architects; J. W. Denington, Esq., L.R.I.B.A., A. Seymour Reeves, Esq., representing the Association of Architects, Surveyors and Technical Assistants; W. J. D. Import, Esq., F.A.I., John Mitchell, Esq., Albert P. Knight, Esq., Arthur Scandrett, Esq., G. J. F. Page, Esq., P. Scott Martin, Esq., Hubert Worley, Esq., representing members of the Society.

Mr. Goddard was unanimously re-elected Chairman and Mr. H. D. Searles-Wood Treasurer of the Society.

Mr. Strachan, when proposing the re-election of the Chairman, stated he was sure he was expressing the views of all present in thanking Mr. Goddard for the interest and time he had freely bestowed on the Society for many years.

Mr. Goddard then expressed his willingness to act as Chairman for a further period of twelve months, and proceeded to give an account of the Society's activities during the past year. He concluded his remarks by pointing out the great advantages membership in this Society offered to architects' and surveyors' assistants compulsorily insurable under the National Health and Pensions Insurance Acts, who, in his view, could not insure to better advantage to themselves than through the Architects' and Surveyors' Approved Society.

The proceedings terminated with a hearty vote of thanks to the Council of the Royal Institute of British Architects for their hospitality in allowing the meeting to be held at the Institute.

#### AUSTRALIAN ARCHITECTURAL STUDENTS' CLUB (IN LONDON)

Australian students are advised that a Club has been formed for the purpose of facilitating study both in England and on the Continent. The Club meets at intervals, when matters of interest are discussed for the mutual benefit of the members. All Australians are invited to join, and further particulars can be obtained from the Hon. Secretary of the Club, Mr. Eric Garthside, 6 Alberos Gardens, Golders Green, London, N.W.11.

#### THE ASSOCIATION FOR THE PRESERVATION OF RURAL SCOTLAND.

##### ANNUAL REPORT.

We have received the Annual Report of the Association for the Preservation of Rural Scotland, a fine testimony to the determination and sanity of those at the back of the good work which is being done. The Report shows the widespread interests of the Association, which include the promotion of a National Trust for Scotland with similar powers of acquisition of land and property to those enjoyed by the National Trust in England. Of particular interest to architects is the work of the Ancient Monuments Committee which, under the Chairmanship of Mr. William Davidson, F.R.I.B.A., has supervised restoration, kept a watchful eye on vandals, and made

many documentary records in plans, sketches and photographs of the ancient monuments of the country. The total expenditure by the Committee of about £10 seems a delightfully low charge to pay for the work which has been done. Attention is also drawn in the Report to a scheme for a central advisory panel on housing, to work in a similar way to the scheme designed by Mr. Longden described in the last JOURNAL.

#### NEW BUILDING MATERIALS AND PREPARATIONS

The Science Standing Committee wish to draw attention to the fact that information in the records of the Building Research Station, Garston, Watford, is freely available to any member of the architectural profession, and suggest that architects would be well advised, when considering the use of new materials and preparations of which they have had no previous experience, to apply to the Director for any information he can impart regarding their properties and application.

#### MACMILLAN STUDENTSHIP.

An election to the above Studentship, which is tenable at the British School of Archaeology at Athens, will be made in July 1931. Candidates must be men of British nationality who have obtained Honours in Classics, and shown special knowledge of some branch of Greek archaeology, history, art, or language. The holder of the Studentship shall reside in Greek lands for not less than eight months in each year.

Applications, together with copies of recent testimonials, should reach the Secretary, British School at Athens, Bedford Square, W.C.1, not later than 1 July 1931.

#### R.I.B.A. MAINTENANCE SCHOLARSHIPS FUND.

The Chairman of the R.I.B.A. Maintenance Scholarships Committee wishes to bring to the notice of members of the R.I.B.A. in London and Middlesex the urgent needs of the R.I.B.A. Maintenance Scholarships Fund. The Fund, except for a small capital, is entirely dependent upon annual subscriptions.

Whole-hearted support is given by the R.I.B.A. Allied Societies throughout the country, and during 1929 a sum of £301 13s. 6d. was provided by them. Members of the R.I.B.A. in London and Middlesex, who cannot support the scheme through an Allied Society, are asked to support the Fund by individual subscriptions.

While there is a great financial depression in London and the surrounding districts, there is a still greater depression throughout the rest of the country. Members in the provinces would feel encouraged in the efforts they are making if they knew that the Fund was strongly supported by R.I.B.A. members in London and Middlesex.

Subscriptions should be sent to the Secretary to the Board of Architectural Education, Royal Institute of British Architects, 9 Conduit Street, London, W.1.

## ELECTION OF STUDENTS R.I.B.A.

The following were elected as Students R.I.B.A. at the meeting of the Council held on 13 April 1931.

BANNERMAN : David Gordon, Blinkbonny Terrace, Blackhall, Edinburgh.  
 BAYES : KENNETH AUSTIN HORTON, 25 Clifton Road, Rugby.  
 BELL : GEORGE PHILIP, Solitude, Lurgan, Co. Armagh, Ireland.  
 BENJAMIN : ROSE ELISABETH, 30 Hocroft Road, London, N.W.2.  
 BEST : AILWYN MONTAGU, The Cottage, Hamble, Southampton.  
 BLOOMER : HARRY CLIFFORD, 4 St. Bernard's Road, Olton, Birmingham.  
 BRENNER : ROBERT MUIL, 115 Union Grove, Aberdeen.  
 BROMILOW : FRANCIS EDWARD, Uplands, Alvechurch, Wore.  
 BROOKS : RUTH HILLYARD, Woodcote, Harborne, Birmingham.  
 CRICKMAY : HUGH WAYDELIN, 38 Beaumont Street, London, W.1.  
 CROWLEY : MARY BEAUMONT, 33 Bridge Road, Welwyn Garden City, Herts.  
 DADLEY-MOORE : ARTHUR, 14 Argyll Road, Westcliff-on-Sea, Essex.  
 DEW : FRANK THOMAS, 26 Roodebloem Road, Woodstock, Cape, South Africa.  
 FIELD : HERBERT CHARLES, 321 Hamlet Court Road, Westcliff-on-Sea, Essex.  
 FLOYD : JOHN PINCKSTON, 72 Sandwell Road, Handsworth, Birmingham.  
 FOLKARD : BENJAMIN STANLEY, Liverpool School of Architecture, University of Liverpool.  
 GARRARD : GEORGE EDWARD JAMES WILFRED, Dennington, Somerville Road, Sutton Coldfield.  
 GOLLINS : FRANK, Walnut Cottage, Saintbury, Broadway, Worcs.  
 HARE : HAYDON LOCKSLEY, 28 Wye Cliff Road, Handsworth, Birmingham.  
 HART : NORMAN DUDLEY, Hillcrest, The Ridgeway, Enfield, Middlesex.  
 HELLBERG : ROLF, "Halfacre," Broad Lane, Coventry.  
 HUTCHINSON : FRANK MAXWELL, 79 Gray Street, Aberdeen.  
 JAMES : BERNARD VINCENT, The Hollies, Cannock, Staffs.  
 MAYORCAS : ELIE, 23 Hartswood Road, Stamford Brook, London, W.12.  
 MILNER : DENYS LESLIE, 12 Oxford Mansions, London, W.1.  
 RATHMELL : MILES, 11 Grafton Road, Wallasey, Cheshire.  
 RENNY : ELEANOUR MARGARET, Albrighton, Wolverhampton.  
 RICHARDS : CHARLES ARTHUR, 51 Warminster Road, London, S.E.25.  
 ROUEN : LYNDON, The Grove, New Brook Road, Bolton.  
 SMITH : WILLIAM ROSS, Airy Park Cottage, Milltimber, Aberdeenshire.  
 STUBBS : GEORGE HAMILTON LEWIS, Cartwright House, 52 Cartwright Gardens, London, W.C.1.  
 WILMOT : ENID MARY, "Byfield," Silhill Road, Solihull, Warwickshire.

## Notices

## THE ANNUAL GENERAL MEETING.

The Ninety-Seventh Annual General Meeting will be held on Monday 11 May, 1931, at 8 p.m., for the following purposes :—

To read the Minutes of the Ordinary General Meeting held on 27 April, 1931; formally to admit members attending for the first time since their election.

To receive the Annual Report of the Council and

Standing Committees for the official year 1930-31, printed on pp. 383-420 of the JOURNAL for 18 April. Copies of the Report will be available for members at the meeting.

To nominate candidates (two members) for the office of Hon. Auditors for the ensuing year.

To receive the list of attendances at the Council and Standing Committees during the Session.

## EXHIBITION OF THE ARCHITECTURE OF MODERN TRANSPORT.

The exhibition in the R.I.B.A. Galleries will remain open until 22 May inclusive, between the hours of 10 a.m. and 8 p.m. (Saturdays 5 p.m.).

It is hoped that members will do their utmost to ensure that all their friends visit the exhibition while it is open and thus justify the time, trouble and expense which have been incurred in arranging it. No charge is made for admission.

## R.I.B.A. ANNUAL DINNER, 1931.

The Annual Dinner will take place on Thursday, 21 May, 1931, at 6.45 for 7.15 p.m., in the Hall of Lincoln's Inn (by kind permission of the Benchers of Lincoln's Inn). Full particulars were issued with the last copy of the JOURNAL.

All members of the R.I.B.A. and of the Allied Societies are cordially invited to make early application for tickets for themselves and their guests. The price of tickets is £1 10s. for members, and £1 15s. for members' guests (inclusive of wines, cigars, etc.).

## THE ARCHITECTS' CONFERENCE, DUBLIN.

17-20 JUNE, 1931.

All members and students of the R.I.B.A. and all members of the Allied Societies, the Architectural Association and the Association of Architects, Surveyors and Technical Assistants, are cordially invited to attend the Conference (see full particulars enclosed with this issue of the JOURNAL). It will greatly facilitate the arrangements if members who propose attending will fill up the fly-sheet attached to the programme and return it to the Secretary R.I.B.A., 9 Conduit Street, W.1, not later than 6 June.

Members of the R.I.B.A. and the Allied Societies who are officials of local authorities are asked to notify the Secretary R.I.B.A. if they would like formal invitations to be sent to such authorities to appoint delegates to the Conference.

## MEMBERSHIP OF THE R.I.B.A.

## THE LICENTIATE CLASS.

The revised Bye-laws of the Royal Institute of British Architects have received the approval of His Majesty's Privy Council and applications may now be sent in for membership of the R.I.B.A. in the Licentiate Class. Full information and the necessary forms will be sent on application being made to the Secretary R.I.B.A., 9 Conduit Street, London, W.1.

## ASSOCIATES AND THE FELLOWSHIP.

Associates who are eligible and desirous of transferring

to the Fellowship are reminded that if they wish to take advantage of the election to take place on 6 July 1931, they should send the necessary nomination forms to the Secretary R.I.B.A. not later than Saturday, 16 May 1931.

#### LICENTIATES AND THE FELLOWSHIP.

The attention of Licentiates is called to the provisions of Section IV, Clause 4 (b) and (cii), of the Supplemental Charter of 1925. Licentiates who are eligible and desirous of transferring to the Fellowship can obtain full particulars on application to the Secretary R.I.B.A., stating the clause under which they propose to apply for nomination.

#### OVERSEAS APPOINTMENTS.

Members contemplating applying for appointments overseas are recommended to communicate with the Secretary R.I.B.A., who will supply them with any available information respecting conditions of employment, cost of living, climatic conditions, etc.

## Competitions

#### R.I.B.A. NEW PREMISES.

The R.I.B.A. invite architects, being Members or Students of the R.I.B.A., or of the Allied and associated Societies, to submit in competition, designs for new premises and headquarters to be erected on a site in Portland Place and Weymouth Street, London, W.1.

##### Jury of Assessors :

Mr. Robert Atkinson [F.].  
Mr. Charles Holden [F.].  
Mr. H. V. Lanchester [F.].  
Sir Giles Gilbert Scott, R.A. [F.].  
Dr. Percy S. Worthington, F.S.A. [F.].

Premiums : £500 and a further £750 to be awarded according to merit.

Last day for receiving designs : 31 March 1932.

Conditions of the competition have been circulated to Members, or may be obtained on application to the Secretary, R.I.B.A., 9 Conduit Street, London, W.1.

#### BIRKENHEAD : NEW CENTRAL LIBRARY.

The Birkenhead Corporation propose to invite architects to submit, in open competition, designs for a new Central Library to be erected in Market Place South. Mr. A. N. Prentice [F.] will be the Assessor. (Conditions are not yet available.)

#### BIRMINGHAM : CENTRAL MUNICIPAL BANK AND HEAD OFFICES.

The closing date for this competition, which was originally 18 April, has been extended to 30 May.

#### COVENTRY : NEW BRANCH BATHS.

The City Corporation of Coventry invite architects to submit, in open competition, designs for new Branch Baths, to be erected at Foleshill, Coventry.

Assessor : Mr. F. J. Horth [F.].

Premiums : 200 guineas, 100 guineas and 50 guineas.

Last day for receiving designs : 30 June 1931.

Conditions of the competition may be obtained on application to Mr. Frederick Smith, Town Clerk, Council House, Coventry. Deposit £1 1s.

#### DUDLEY : NEW COUNCIL SCHOOL.

The Dudley Education Authority invite architects within a radius of 15 miles of Dudley to submit, in competition, designs for a new Council School to be erected at Blowers Green, Dudley.

Assessor : Mr. Herbert T. Buckland [F.].

Last day for receiving designs : 1 June 1931.

Conditions of the competition may be obtained on application to Mr. J. Whaley, Director of Education, Education Offices, St. James's Road, Dudley.

#### LEICESTER : NEW OFFICES FOR CORPORATION DEPARTMENTS.

The City Corporation of Leicester invite architects in the British Isles to submit, in open competition, designs for new offices for Corporation Departments, to be erected in Charles Street.

Assessor : Mr. E. Berry Webber [A.].

Premiums : £300, £200 and £100.

Last day for receiving designs : 26 June 1931.

Conditions of the competition may be obtained on application to Mr. A. T. Gooseman, M.Inst.C.E., City Engineer and Surveyor, Town Hall, Leicester. Deposit £2 2s.

#### SOUTH SHIELDS : INGHAM INFIRMARY.

The Committee of Management of the Ingham Infirmary, South Shields, invite architects in the area of the Northern Architectural Association to submit, in competition, designs for proposed extensions.

Assessor : Lt.-Col. George Reavell, O.B.E. [F.].

Premiums : £250, £100, and £50.

Last day for receiving designs : 16 June 1931.

Conditions of the competition may be obtained on application to Mr. John Potter, Secretary, Ingham Infirmary, South Shields. Deposit £2 2s.

#### SOUTHAMPTON : NEW SCHOOL.

The Governors of King Edward VI School, Southampton, invite architects to submit, in open competition, designs for a new School to be erected on a site at the corner of Hill Lane and Wilton Road, Southampton.

Assessor : Mr. Sydney Tatchell [F.].

Premiums : £150, £100 and £50.

Last day for receiving designs : 6 June 1931.

Conditions of the Competition may be obtained on application to Mr. G. A. Waller, Clerk to the Govenors, 7 Albion Place, Southampton. Deposit £1 1s.

## Members' Column

### PRACTICE WANTED

MEMBER [F.], with long experience in England and Far East, is prepared to purchase practice where the owner contemplates retirement, or would consider partnership in well-established practice.—Apply Box No. 2,741, c/o The Secretary R.I.B.A., 9 Conduit Street, London, W.1.

MEMBER [A.], school-trained man, four years' practice, considerable experience, wishes to undertake temporary assistance to architects in own office near Temple, also collaboration with architects resident in the country. Would consider a permanent position with a view to a partnership.—Apply Box No. 2,841, c/o The Secretary R.I.B.A., 9 Conduit Street, London, W.1.

### SITUATION VACANT.

TOWN Planning Assistant required by the Singapore Improvement Trust. Age 25-30 years, and preferably unmarried. Candidates must possess the Diploma of the Town Planning Institute, or other equivalent Town Planning Diploma, and must have definite Town Planning experience under a qualified architect or engineer. Applications to be in by 11 May 1931.—For full particulars apply Messrs. Pierce and Williams, M.M.Inst.C.E., 1 Victoria Street, London, W.1.

### CHANGE OF ADDRESS.

MR. W. ALAN DEVEREUX, A.R.I.B.A., has changed his address to 11 King's Bench Walk, where he is now practising and will be glad to receive trade circulars.

### SURVEYOR WANTED.

QUANTITY Surveyor, temporary, required urgently. Used to sewerage and water supply works. Preferably about 30-35. Send references, experience, salary required to Box 2341, c/o Secretary R.I.B.A., 9 Conduit Street, London, W.1.

## Minutes XIV

### SESSION 1930-1931.

At the Twelfth General Meeting (Ordinary) of the Session 1930-1931, held on Monday, 27 April 1931, at 8.0 p.m., Sir Banister Fletcher, F.S.A., President, in the Chair.

The attendance book was signed by 24 Fellows (including 6 members of Council), 25 Associates (including 1 Member of Council), 4 Licentiates, and a large number of visitors.

The Minutes of the Ordinary General Meeting held on 13 April 1931 having been published in the JOURNAL were taken as read, confirmed and signed as correct.

The Hon. Secretary announced the decease of:—

Alfred Conder, elected Associate 1873, Fellow 1886, transferred to list of Retired Fellows 1925. Mr. Conder was for many years a member of the R.I.B.A. Board of Examiners.

John Leeming, elected Fellow 1901.

Arthur Wakerley, elected Fellow 1902, Resigned 1921.

Reinstated 1925. A Past President of the Leicestershire and Leicestershire Society of Architects and represented that body on the Council 1902-3.

William Jacomb Gibbon, elected Associate 1881.

John Newnham, elected Associate 1894.

and it was Resolved that the regrets of the Institute for their loss be entered on the Minutes and that a message of sympathy and condolence be conveyed to their relatives.

The following members attending for the first time since their election were formally admitted by the President:—

Mr. C. F. Morgan [L.].

Mr. G. Langley Taylor [L.].

Mr. Maxwell Ayrton [F.] having read a paper on "Modern Bridges," a discussion ensued and on the motion of Mr.

Percy Harris, M.P., seconded by Sir George Humphreys, K.B.E., President of the Institution of Civil Engineers, a vote of thanks was passed to Mr. Ayrton by acclamation and was briefly responded to.

The proceedings closed at 10 p.m.

### A.B.S. INSURANCE DEPARTMENT.

#### HOUSE PURCHASE SCHEME

(for property in Great Britain only).

*Further Privileges now Available.*

The Society is able, through the services of a leading Assurance Office, to assist an Architect (or his client) in securing the capital for the purchase of a house for his own occupation, on the following terms:—

#### AMOUNT OF LOAN.

Property value exceeding £666, but not exceeding £2,500, 75 per cent. of the value.

Property value exceeding £2,500, but not exceeding £4,500, 66½ per cent. of the value.

The value of the property is that certified by the Surveyor employed by the Office.

N.B.—Legal costs and survey fees, and, in certain cases, the amount of the first quarter's premium payment will be advanced in addition to the normal loan.

#### RATE OF INTEREST.

In respect of loans not exceeding £2,000 5½ per cent. gross  
" " in excess of " 5½ " "

#### REPAYMENT.

By means of an Endowment Assurance which discharges the loan at the end of 15 or 20 years, or at the earlier death of the borrower.

#### SPECIAL CONCESSION TO ARCHITECTS.

In the case of houses in course of erection, it has been arranged that, provided the Plan and Specification have been approved by the Surveyor acting for the Office, and the amount of the loan agreed upon, and subject to the house being completed in accordance therewith, ONE HALF of the loan will be advanced on a certificate from the Office's Surveyor that the walls of the house are erected and the roof on and covered in.

NOTE.—Since 1928, over £50,000 has been loaned to architects under this scheme, and as a result over £600 has been handed to the Benevolent Society.

If a quotation is required, kindly send details of your age next birthday, approximate value of house and its exact situation, to the Secretary, A.B.S. Insurance Department, 9 Conduit Street, London, W.

It is desired to point out that the opinions of writers of articles and letters which appear in the R.I.B.A. JOURNAL must be taken as the individual opinions of their authors and not as representative expression of the Institute.

#### R.I.B.A. JOURNAL.

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